EXHIBIT

FOLDer

3 P+.4



b->co __, cerp. Court, Gioucester, VA 23001 PH: 804-694-8285, FAX: 804-695-1129 www.coastalbio.com

SAMPLE INFORMATION/CHAIN-OF-CUSTODY (FORM ETF2011E Rav. 4/15/09)

Lab Sample II (Lab Use Only	D 1	A A A Project ID	9 0 3 Y N N	B	900 9400 Na (E
CLIENT/FACILITY			CONTACT	0 1 14	
NAME C	mean 1	rotein	& PHONE # 160	Schultz	453-4211
NPDES PERMIT NO	VAOD	03267	10	OUTFALL # OR LOCATION	001
SAMPLE CHLORINATED?	NO SAM	PLE HLORINATED? NO	IF CHLORINE PRESEN PERMIT SPECIFY DEC		
TESTS	SPECIES OR EPA METH #		mibahis	ACUTE [CHRONIC-ET
REQUESTED:	SPECIES OR EPA METH#			ACUTE []	CHRONIO-E
OTHER TESTS:	CFA INC III W		Civariegalis	AUDIE LI	CHRONIO
			EFAULT SERIES OF 100, 50, 25, I DOUBT PLEASE ATTACH A CO		
	EINFORMATION	****		- 100 - 100	
SAMPLE DATE		SAMPLE TIME	\$	SAMPLE VOLUME	
COMPOSITE S SAMPLE START DATE & TIME	AMPLE INFORM	ATION SAMPLE END DATE & TIME		7.45 AUTOSAN TEMP. (%	
TIME OR FLOW	NUMBER	96	/OL (ml)	TIME	15-
PROPORTIONAL COMPOSITE	SUBSAMPLE SET VOLUM		SUBSAMPLES - 200		TAL
INFORMATION'	SUBSAMPLE		FLOW_ 175,50	0501/09X10	LUME
		ED ON FLOW (COMPOSITING	G *BY HAND*) ATTACH SAMPLE	AND FLOW INFORMAT	ION ON SEPARATE SHEET
FIELD MEASUR	REMENTS DISCHARGE	SAMPLE	SAMPLE DA	TE/TIME	INITIALS
DISCHARGE TEMP (°C)	pH (S.U.)		RC (mg/l) (e/g. 02	/23/00 1835)	0.0
33.4	7.06	4.0	9/17/	09:00	VAS
MEASUREMENTS MU	IST BE TAKEN WITHIN 1	5 MINUTES OF SAMPLE OR	LAST SUBSAMPLE COLLECTION	ν.	
COMMENTS:			Y		11
Teal Sc.		echnical i		el Seht	9/17/09.
(PRINTED NAM	MEJAFFILIATION :	SAMPLERIANALYST) (SIG	NATURE)	(DATE)
RED	NGUISHER BY	THE TOTAL	OR MANERAL METERS	RECEIVED	JBM2
VR Ha	0/	9/17/09	10:45	Me	
		19/19/09			•
SHIPPING MET	HOD: UPS	FEDEX HANI	D DELIVERY OTI	HER	
CONDITION ON	ARRIVAL: ACC	EPTABLEOTHE	R	······································	
			ON ICE? YES NO) <u> </u>	

NOTE: It is the responsibility of the sampler to insure that samples are properly collected, preserved (>0-6° C) and shipped. Sample hold time is 36 h. Additional costs may be incurred by improper preservation, shipping or receipt of samples after 3 p.m. or on weekends and holidays.



6400 Enterprise Court, Gloucester, VA 23061 PH: 804-694-8285, FAX: 804-695-1129 www.coastalbio.com

SAMPLE INFORMATION/CHAIN-OF-CUSTODY (FORM ETF2011E Rev. 4/15/09)

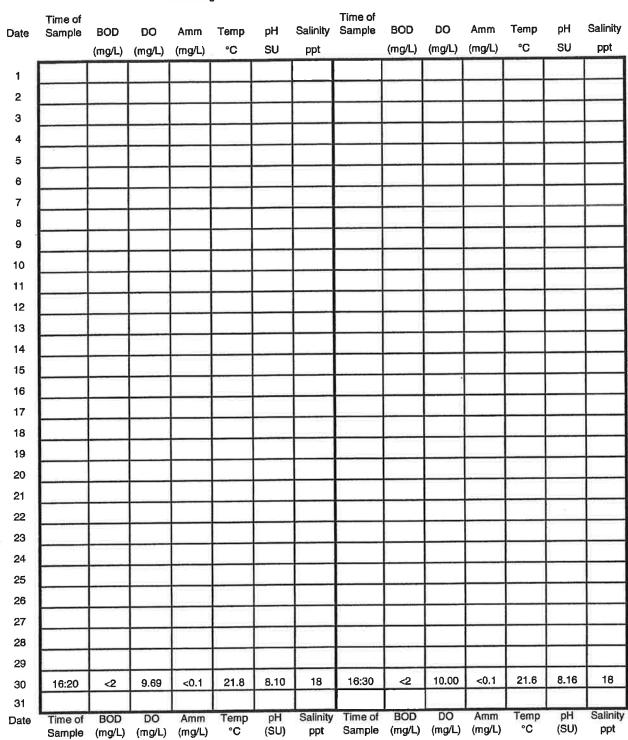
Lab Sample ID (Lab Use Only)	C)	M E G	D 9	03	C Spi	. ** :*:	€ 5
FACILITY INFO	RMATION						
NAME OF	neGA 1	POTEIN	CONT/ & PHO		Schult	2 453-4	11/
PERMIT NO 1	IA DOO	3867			TFALL #	001	1
SAMPLE CHLORINATED?		MPLE CHLORINATED?	No FCHL	ORINE PRESENT L T SPECIFY DECHL	PON ARRIVAL A	T LAB, DOES SAMPLES?	1
TESTS	SPECIES OR EPA METH#	114000	m.b	abia	ACUTE -E	CHRONIS	1
	SPECIES OR EPA METH#		1,1/0	ilantes	ACUTE 12	CHRONIC Z	1
OTHER TESTS:			C V41	(Ight)		011111111111111111111111111111111111111	1
		14					
A SPECIFIC DILUTION PRIOR TESTING, WILL	SERIES MAY BE REG BE USED UNLESS IN	DUIRED IN THE PERMI	T. A DEFAULT SERIE IF IN DOUBT PLEA	S OF 100, 50, 25, 12.5 SE ATTACH A COPY	AND 8.3%, OR COL OF APPLICABLE P	NCENTRATIONS USED IN ERMIT PAGES,	1
GRAB SAMPLE	INFORMATION	Ü					
SAMPLE DATE	: ;	SAMPLE TIM	E	SAN	IPLE VOLUME		
COMPOSITE SA	MPLE INFORM	ATION					i
DATE & TIME 9/	12/09 07	7: 15 DATE &		9 0715	AUTOSAM TEMP. (°C		
TIME OR FLOW PROPORTIONAL	NUMBER SUBSAMPL	9/	VOL (ml) SUBSAMPLE	200	TIME .	1	J
COMPOSITE INFORMATION	SET VOLUM	1E	SET VOI	UME 94/	INCREMENTO	TAL	
	SUBSAMPL E SUBSAMPLES BAS			75,500/de		LUMEION ON SEPARATE SHEET	
FIELD MEASURE					T LOTY IIII ONIDAI	ion on our morre once i	
DISCHARGE TEMP (°C)	DISCHARGE pH (S.U.)	SAMPLE TEMP (°C)	SAMPLE TRC (mg/l)	DATE/		INITIALS	
331	7)	3.8	TAC (Hgr)	9/12/19	0730	718.	
MEASUREMENTS MUST	BE TAKEN WITHIN		E OR LAST SUBSAN				
COMMENTS:			ō.				
			*				
(PRINTED NAME	JAFFILIATION	SAMPLER/ANAL	YST)	(SIGNA	TURE)	(DATE)	
RELING	UISHED BY	DAJ	E THE STIME		REGEIVED	IBM V	
If And	<i>b</i>	P/18/6	9 10:1	D. Beverly	Honolin	derau	
· ·					1		
SHIPPING METHO		(2000)		Y X OTHE	R		
CONDITION ON A	RRIVAL: ACC	EPTABLEO	THER				
SAMPLE ARRIVAI	_ TEMP: (^o c)	5 ARRIV	ED ON ICE? Y	es_ <u> </u>			

NOTE: It is the responsibility of the sampler to insure that samples are properly collected, preserved (>0-6° C) and shipped. Sample hold time is 36 h. Additional costs may be incurred by improper preservation, shipping or receipt of samples after 3 p.m. or on weekends and holidays.

Chesapeake Bay Water Quality Monitoring Data

Predischarge

After Discharge



Name of Vessel: Conrad

Name of Sampler: Ted Schultz

AttachmentHandler.ashx

Omega Protein, Inc. VPDES Permit # VA0003867 Part I.B.3

Chesapeake Bay Water Quality Monitoring Data

Predischarge

After Discharge

	Time of				3-			Time of				Ū		
Date	Time of Sample	BOD	DO	Amm	Temp	рΗ	Salinity		BOD	DO	Amm	Temp	pН	Salinity
		(mg/L)	(mg/L)	(mg/L)	°C	SU	ppt		(mg/L)	(mg/L)	(mg/L)	°C	SU	ppt
1											α			
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29														
	17:00	<2	9.54	<0.1	21.7	8.09	18	17:10	<2	9.60	<0.1	21.9	8.17	18
30 31	17:00		9.04	VV.1	21.1	0.00	"	17.10	,	0.00			J.1.	
Date	Time of	BOD	DO	Amm	Temp	pН	Salinity	Time of	BOD	DO	Amm	Temp	pН	Salinity
	Sample	(mg/L)	(mg/L)	(mg/L)	°C	(SU)	ppt	Sample	(mg/L)	(mg/L)	(mg/L)	°C	(SU)	ppt

Name of Vessel: Dempster

Name of Sampler: Ted Schultz

AttachmentHandler.ashx

Facility Name: Omega Protein Address: Reedville, VA.	
VPDES Permit No.: VA0003867	
Report Period: From 9/1/09 To 9/6/09	a.
	/ NONCOMPLIANCE * as appropriate)
	· ·
*Comments on Noncompliance	
Theodore Schultz / Technical Name of Principal Exec. Officer or Authorized Agent /	/ Supervisor Title
I certify under penalty of law that this document and a supervision in accordance with a system designed to evaluate the information submitted. Based on my inquor those persons directly responsible for gathering the my knowledge and belief true, accurate and complete submitting false information, including the possibility of U.S.C. paragraph 1001 and 33 U.S.C. paragraph 1319 to \$10,000 and or maximum imprisonment of between Signature of Principal Officer or Authorized Agent /	assure that qualified personnel properly gather and iry of the person or persons who manage the system information, the information submitted is to the best of all am aware that there are significant penalties for fine and imprisonment for knowing violations. See 18 (Penalties under these statutes may include fines up a 6 months and 5 years).
*): (2):	

Address: Reedville, VA.		
VPDES Permit No.: VA0003867		×
Report Period: From 9/7/09 To	9/13/09	v.
Paint Area	COMPLIANCE / NONCOMPLIA (check as appropriate)	NCE *
,		
	Harten and the second	
-		
*Comments on Noncompliance		
Theodore Schultz/ Name of Principal Exec. Officer or Au	Technical Supervi	300
I certify under penalty of law that this esupervision in accordance with a system evaluate the information submitted. Be or those persons directly responsible from knowledge and belief true, accurate submitting false information, including U.S.C. paragraph 1001 and 33 U.S.C. to \$10,000 and or maximum imprison.	em designed to assure that qualified ased on my inquiry of the person or p or gathering the information, the infor te and complete. I am aware that the the possibility of fine and imprisonme paragraph 1319. (Penalties under the	d personnel properly gather and bersons who manage the system mation submitted is to the best of here are significant penalties for ent for knowing violations. See 18 ese statutes may include fines up
Signature of Principal Officer or Autho	orized Agent / Date	

Address: Reedville, VA.	
VPDES Permit No.: VA0003867	
Report Period: From 9/14/09 To	9 120109
Paint Area	COMPLIANCE / NONCOMPLIANCE * (check as appropriate)
2 5 - 2 - CH Marie Consulta	
	
*Comments on Noncompliance	
Theodore Schultz - Theodore Schultz - Theodore Schultz - The Name of Principal Exec. Officer or Authority	Technical Supervisor. prized Agent / Title
evaluate the information submitted. Base or those persons directly responsible for only knowledge and belief true, accurate a submitting false information, including the J.S.C. paragraph 1001 and 33 U.S.C. paro \$10,000 and or maximum imprisonme	cument and all attachments were prepared under my direction or designed to assure that qualified personnel properly gather and ed on my inquiry of the person or persons who manage the system gathering the information, the information submitted is to the best of and complete. I am aware that there are significant penalties for a possibility of fine and imprisonment for knowing violations. See 18 ragraph 1319. (Penalties under these statutes may include fines up nt of between 6 months and 5 years).
Signature of Principal Officer or Authorize	ed Agent / Date

Facility Name: Omega Pr Address: Reedville, VA.	rotein			
VPDES Permit No.: V	'A0003867			147
Report Period: From 9	121/09 To 9/3	0109		
Paint Area	COM	MPLIANCE / NON (check as appro	VCOMPLIANCE * opriate)	
			-	
<u> </u>				
-				
			[9
*Comments on Noncomp	bliance			∞
Name of Principal Exec.	Officer or Authorize	Technica ed Agent / Title	1 Superi	11500
I certify under penalty of supervision in accordance evaluate the informations or those persons directly my knowledge and belief submitting false informati U.S.C. paragraph 1001 at to \$10,000 and or maxim	te with a system de submitted. Based o responsible for gath f true, accurate and on, including the pond 33 U.S.C. paragrum imprisonment o	esigned to assure the my inquiry of the nering the information complete. I am a sibility of fine and raph 1319. (Penaltiof between 6 month	hat qualified person person or persons on, the information ware that there an imprisonment for king ies under these stated as and 5 years).	onnel properly gather and who manage the system submitted is to the best of e significant penalties for nowing violations. See 18 tutes may include fines up
Signature of Principal Off	ficer or Authorized	Agent / Date	<u> </u>	

8201 County Drive Disputanta, Virginia 23842-6144 Phone: 804-991-3213 Facsimile: 804-991-2194

E-mail: swiftcreekinc@aol.com

NVIRONMENTAL, INC.

September 17, 2009 Project #06-012

Mr. William Purcell Omega Protein P.O. Box 175 Reedville, Virginia 22801

Re:

3rd Quarter 2009 Ground Water Monitoring Report

Aerated Lagoon

Omega Protein, Reedville, Virginia VPDES Permit No. VA0003867

Dear Mr. Purcell:

With requirements to the VPDES Permit No. VA0003867, Swift Creek Environmental, Inc, has completed the 2009, 3rd quarterly ground water monitoring report for the above referenced facility. The location of the facility is depicted on Figure 1 - Site Vicinity Map. The lagoon wells sampled are designated and identified as monitor wells, MWL1, MWL2, MWL3, MWL4, MWL5 and MWL6. The location of the lagoon monitor wells are presented on the attached Potentiometric Surface Map - Figure 2.

A third order survey was conducted to determine relative well elevations and static ground water levels. Monitor well, ground water levels and relative elevations are presented in Table 1. An arbitrary datum of 10.00 feet (from USGS. 7.5 minute Reedville, Virginia Quadrangle) was established as a benchmark.

Monitor Well	Total Depth (feet)	Depth to GW (feet)	PID Reading (ppm)	Elevation - Top of Casing	Elevation - GW (feet)
MWL1	15.0	10.84	0	13.52	2.68
MWL2	15.0	10.06	0	12.20	2.14
MWL3	15.0	3.15	0	8.36	5.21
MWL4	15.0	11.60	0	14.80	3.20
MWL5	15.0	3.91	0	12.48	8.57
MWL6	15.0	4,15	0	12.17	8.02

Topographic and groundwater data indicates that ground water flow is to the south. Attached as Figure 2 is the Lagoon Potentiometric Surface Map.

On August 31, 2009, the lagoon monitor wells were developed and sampled for parameters as required in the VPDES Permit and requested by the VDEQ. Ground water samples were obtained from on-site monitor wells MWL1 through MWL6. Depth to ground water and total well depths were obtained using an oil/water interface probe to calculate the height of the standing water column in the monitor wells. After the volume of standing water was calculated in the monitor wells, a minimum of three well volumes of ground water was removed. Ground water samples were then collected using clean, disposable, plastic bailers to minimize the potential for cross contamination of monitor wells. The samples were placed in an insulated cooler packed with ice for shipment to the laboratory. The water samples were submitted to Air, Water and Soil Laboratorles, Incorporated for laboratory analysis of Aluminum, Copper, Silver, Fecal Coliform, Nitrate, Chloride, Ammonia, TOC and Phosphorous. Chain of Custody forms were completed on-site and submitted with the samples. Chemical results for the 2009, 3rd Quarter sampling event are presented in Tables 2 and 3. The Certificates of Analyses and Chain of Custody are attached.

Sample ID/Monitor well	Turbidity	рH	Specific Conductivity	Dissolved Oxygen	Temperature
SC-OP-MWL1	11.18	5.62	1417	2.68	15.1
SC-OP-MWL2	11.76	5.49	1272	3.89	15.6
SC-OP-MWL3	20.00	5.41	929	3.50	16.1
SC-OPMWL4	185	5.18	344	3.1 <u>5</u>	16.3
SC-OP-MWL5	70	6.02	557	3.78	16.4
SC-OP-MWL6	50	6.04	125	3.83	16.3
Units	μn	SU	u/s	mg/l	Celsius
Quantification Limits	.01	0.01	1.0	.01	0.1

Sample ID Monitor well	Al	Cu	Ag	E-Coli	Nitrate	Chloride	Ammonia	TOC	Phosphorus
SC-OP-MWL1	4.92	0.021	<0.01	1410	<0.1	120	3.49	36.7	80.0
SC-OP-MWL2	0.435	<0.01	<0.01	<1	7.2	185	11.3	4.3	<0.01
SC-OP-MWL3	0.491	<0.01	<0.01	<1	18.4	94.5	0.95	1.7	0.19
SC-OP-MWL4	18.9	<0.01	<0.01	<1	3.1	32.7	<0.1	2.1	0.15
SC-OP-MWL5	38.0	0.01	<0.01	<1	2.9	135	1.11	2.1	0.08
SC-OP-MWL6	7.19	<0.01	<0.01	<1	1.2	9.6	<0.1	1.8	<0.01
Units	mg/I	mg/l	mg/l	MPN	mg/l	mg/l	mg/l	mg/l	mg/l
Quantification Limits	0.05	0.01	0.01	1.0	0.1	1.0	0.1	1.0	0.05-0.5
002 Outfall Discharge Limits	•	NL	NL	200	NL	NL	45	NL	NL
MCL's Primary or Secondary	-	1.3	0.1	0.0	10	250	-	-	٠

The recorded E-Coli concentration of 1410 MPN/100ml in monitor well, MWL1 exceeds the permitted discharge limitations. Historical E-Coli concentrations in this well have been recorded to be <1 MPN/100ml to 160 MPN/100ml, while Cockrell Creek and the adjacent pond recorded historical E-Coli concentrations of 2420 MPN/100ml and 1730 MPN/100ml, respectively. Presented in Table 4 are the historical E-Coli concentrations recorded in monitor well, MWL1 as well as the adjacent surface water bodies.

Date	E-Coli
9/8/06	48
12/1/06	<1
2/28/07	<1
5/30/07	<1
9/27/07	1
11/29/07	<1
3/25/08	<1
6/3/08	160
8/29/08	3
12/4/08	6
2/27/09	<1
5/28/09	
8/31/09	1410

Cockrell Creek	2420
Pond	1730
Units	MPN
Quantification Limits	1.0
002 Outfall Discharge Limits	200 MPN/100ml
MCL's Primary or Secondary	0.0

Continued sampling of the monitor wells is required to determine if the recorded E-Coli concentration in monitor well, MW1 is an anomaly or indicative of potential ground water impairment.

Nitrate concentrations in monitor well, MWL3 continue to exceed federal drinking water standards. The average Nitrate concentration in monitor well, MWL3 prior to this sampling event was 7.10 mg/l, with a range between 3.02 mg/l and 18.4 mg/l. The remaining parameters quantitatively analyzed for this sampling event were below Outfall Discharge Limits and/or the federal primary or secondary drinking water standard. The next quarterly ground water sampling event is scheduled for December 2009.

Should you have any questions regarding this letter, please contact me at 804.991.3213. Thank you for the opportunity to serve you.

Sincerely,

B. Thomas Houghton, Principal Virginia Professional Geologist #950

attachments:

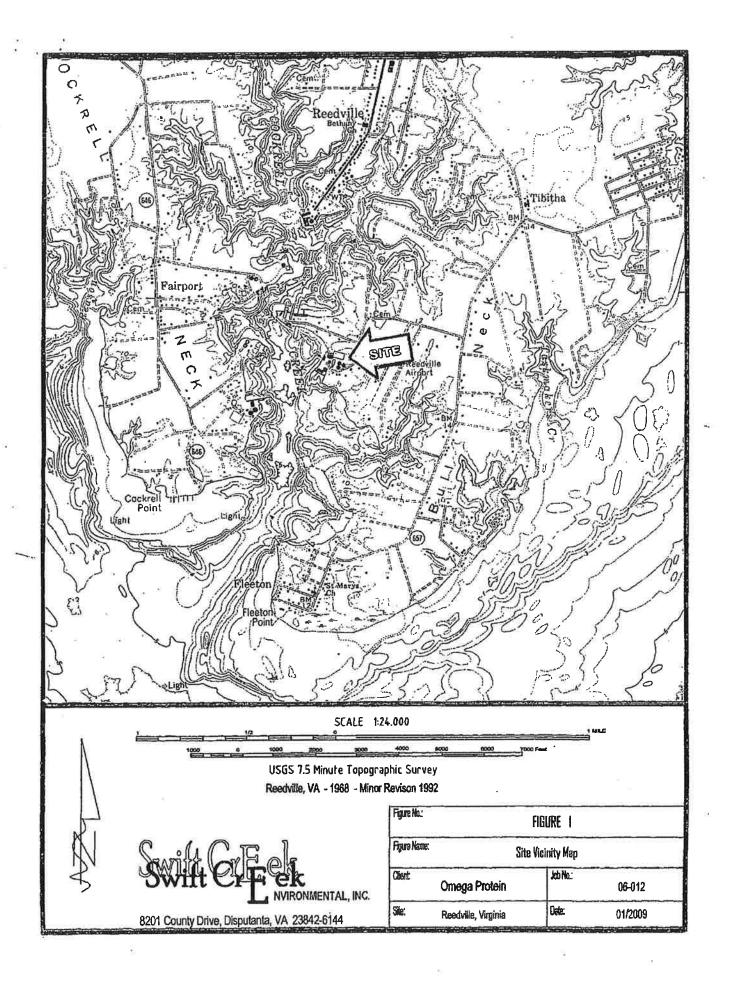
Site Vicinity Map

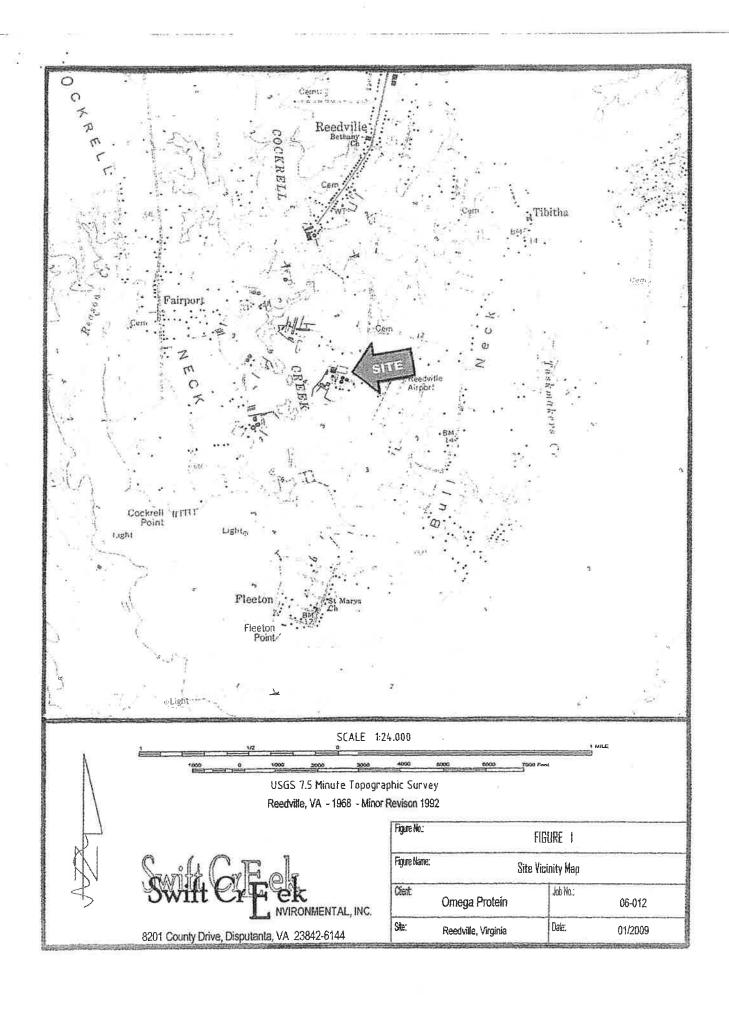
Potentiometric Surface Map

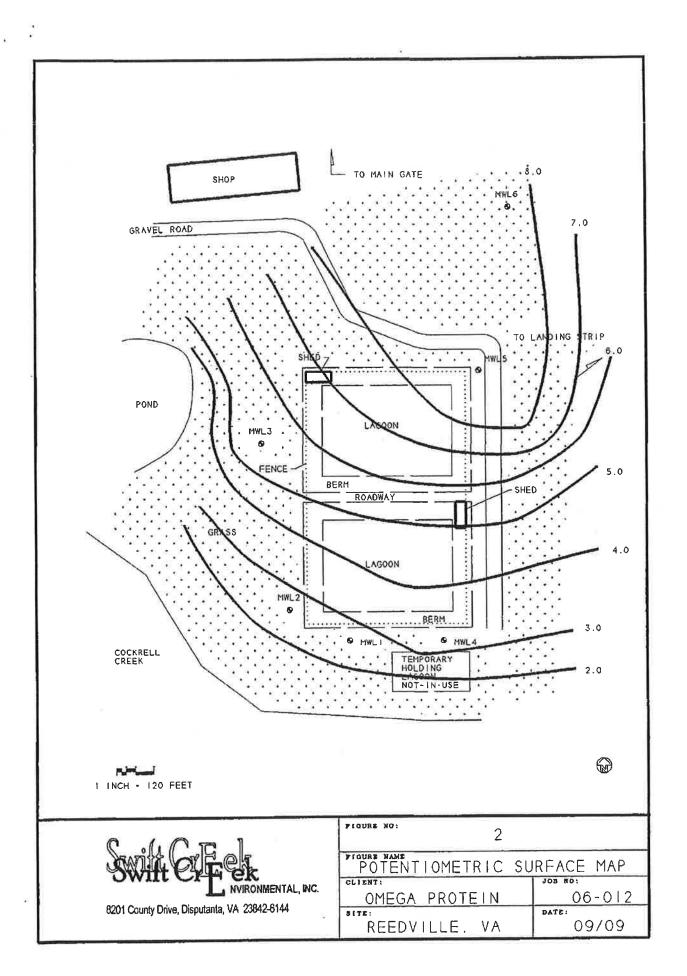
Certificates of Analyses and Chain of Custody

cc:

Ms. Denise Mosca - VDEQ Piedmont Regional Office









Certificate of Analysis

Final Report

Laboratory Order ID 09080612

Client Name:

Swift Creek Environmental, Inc.

8201 County Drive

Disputanta, VA 23842

Date Received:

Date Issued:

August 31, 2009

September 08, 2009

Submitted To: Tom Houghton

Project Number:

06-012

Client Site I.D.: Omega Protein Lagoon Monitor Wells

Purchase Order:

06-012

09080612-001 Sample I.D.: SC-OP-MWL1 Laboratory Sample I.D.: Date/Time Sampled: 08/31/09 12:00 Analysis Date/Time Analyst Rep Limi Sample Results Method Parameter 1410 mpn/100mL 1 08/31/2209 17:00 ETS Collert 18/QT E. Coli 0.050 09/08/09 14:05 MWL SW6010C 4.92 mg/L Aluminum 09/08/09 14:05 MWL 0.010 SW6010C 0.021 mg/L Copper 09/08/09 14:05 **MWL** 0.010 SW6010C < 0.01 mg/L Silver 09/02/09 11:13 LMT 0.10 EPA350.1/A2.0 3,49 mg/L Ammonia 09/04/09 14:11 CLA 1.0 EPA300.0/R2.1 120 mg/L Chloride 0.1 09/01/09 9:09 LMT < 0.1 mg/L Calc. Nitrate 09/03/09 12:43 **LMT** 0.1 < 0.1 mg/L Nitrate+Nitrite SM18/4500-NO3 F 09/01/09 9:09 **LMT** 0.05 SM18/4500-NO2 B < 0.05 mg/LNitrite 09/04/09 10:22 LMT 0.01 0.08 mg/L Phosphorus, Total SM18/4500-P E NBA 09/08/09 9:46 1.0 36.7 mg/L SW9060 Total Organic Carbon (TOC)

Sample I.D.: SC-OP-MWL2

Laboratory Sample I.D.:

09080612-002

cample i.b co.or marker					
Date/Time Sampled: 08/31/09	13:05			Analysis	
Parameter	Method	Sample Results	Rep Limi	Date/Time	Analyst
E. Coll	Colifert 18/QT	< 1 mpn/100mL	1	08/31/2209 17:00	ETS
Aluminum	SW6010C	0.435 mg/L	0.050	09/08/09 14:08	MWL
Copper	SW6010C	< 0.01 mg/L	0.010	09/08/09 14:08	MWL
Silver	SW6010C	< 0.01 mg/L	0.010	09/08/09 14:08	MWL
Ammonia	EPA350.1/R2.0	11.3 mg/L	0.10	09/02/09 11:15	LMT
Chloride	EPA300.0/R2.1	185 mg/L	1.0	09/04/09 14:25	CLA
Nitrate	Calc.	7.2 mg/L	0.1	09/01/09 9:09	LMT
Nitrate+Nitrite	SM18/4500-NO3 F	7.2 mg/L	0.1	09/03/09 12:46	LMT
Nitrite	SM18/4500-NO2 B	< 0.05 mg/L	0.05	09/01/09 9:09	LMT
Phosphorus, Total	SM18/4500-P E	< 0.01 mg/L	0.01	09/04/09 10:22	LMT
Total Organic Carbon (TOC)	SW9060	4.3 mg/L	1.0	09/08/09 9:46	NBA



Certificate of Analysis

Final Report

Laboratory Order ID 09080612

Client Name: Swift Creek Environmental, Inc.

Date Received:

August 31, 2009

8201 County Drive

Disputanta, VA 23842

Date Issued:

September 08, 2009

Submitted To: Tom Houghton

Project Number:

06-012

Client Site I.D.: Omega Protein Lagoon Monitor Wells

Purchase Order:

06-012

Sample I.D.: SC-OP-MWL	3		Laboratory Sam	ple I.D.: 0908	0612-003
Date/Time Sampled: 08/31/	09 13:35			Analysis	
Parameter	Method	Sample Results	Rep Limi	Date/Time	Analyst
E. Coll	Colliert 18/QT	< 1 mpn/100mL	1	0B/31/2209 17:00	ETS
Aluminum	SW6010C	0.491 mg/L	0.050	09/08/09 14:11	MWL
Copper	SW6010C	< 0.01 mg/L	0.010	09/08/09 14:11	MWL
Silver	SW6010C	< 0.01 mg/L	0.010	09/08/09 14:11	WWL
Ammonia	EPA350.1/R2.0	0.95 mg/L	0.10	09/02/09 11:18	LMT
Chloride	EPA300.0/R2.1	94.5 mg/L	1.0	09/03/09 17:44	CLA
Nitrate	Calc.	18.4 mg/L.	0.1	09/01/09 9:09	LMT
NItrate+Nitrite	SM18/4500-NO3 F	18.4 mg/L	0.1	09/03/09 12:49	LMT
Nitrite	SM18/4500-NO2 B	< 0.05 mg/L	0.05	09/01/09 9:09	LMT
Phosphorus, Total	SM18/4500-P E	0.19 mg/L	0.01	09/04/09 10:22	LMT
Total Organic Carbon (TOC)	\$W9060	1.7 mg/L	1.0	09/08/09 9:46	NBA

Sample I.D.: SC-OP-MWL4

Laboratory Sample I.D.:

09080612-004

Sample I.D., GO-OF-WIVE	·T		Laboratory Carri	p.o	· · · · · · · · · · · · · · · · · · ·	
Date/Time Sampled: 08/31/	/09 12:25	(*); (*)		Analysis		
Parameter	Method	Sample Results	Rep Limi	Date/Time	Analyst	
E. Coli	Collert 18/QT	< 1 mpn/100mL	1	08/31/2209 17:00	ETS	
Aluminum	SW6010C	18.9 mg/L	0.050	09/08/09 14:14	MWL	
Соррег	SW6010C	< 0.01 mg/L	0.010	09/08/09 14:14	MWL	
Silver	SW6010C	< 0.01 mg/L	0.010	09/08/09 14:14	MWL	
Ammonia	EPA350.1/R2.0	< 0.1 mg/L	0.10	09/02/09 11:20	LMT	
Chloride	EPA300.0/R2.1	32.7 mg/L	1.0	09/03/09 19:36	CLA	
Nitrate	Calc.	3.1 mg/L ⁻	0.1	09/01/09 9:09	LMT	
Nitrate+Nitrite	SM18/4500-NO3 F	3.1 mg/L	0.1	09/03/09 12:52	LMT	
Nitrite	SM18/4500-NO2 B	< 0.05 mg/L	0.05	09/01/09 9:09	LMT	
Phosphorus, Total	SM18/4500-P E	0.15 mg/L	0.01	09/04/09 10:22	LMT	
Total Organic Carbon (TOC)	SW9060	2.1 mg/L	1.0	09/08/09 9:46	NBA	



Certificate of Analysis

Final Report

Laboratory Order ID 09080612

Client Name:

Swift Creek Environmental, Inc.

8201 County Drive

Disputanta, VA 23842

Date Received:

August 31, 2009

Date Issued:

September 08, 2009

Submitted To: Tom Houghton

Sample I.D.: SC-QP-MWL5

Project Number:

06-012

Client Site I.D.: Omega Protein Lagoon Monitor Wells

Purchase Order:

06-012

09080612-005 Laboratory Sample I.D.:

Odinpio non Od on min-				F	
Date/Time Sampled: 08/31/09	13:50			Analysis	
Parameter	Method	Sample Results	Rep Umi	Date/Time	Analyst
 E. Coli	Colifert 18/QT	< 1 mpn/100mL	t	08/31/2209 17:00	ETS
Aluminum	SW6010C	38.0 mg/L.	0.050	09/08/09 14:27	MWL
Copper	SW6010C	0.010 mg/L	0.010	09/08/09 14:16	MWL
Silver	SW6010C	< 0.01 mg/L	0.010	09/08/09 14:16	MWL
Ammonia	EPA350.1/R2.0	1.11 mg/L	0.10	09/02/09 11:22	LMT
Chloride	EPA300.0/R2.1	135 mg/L	1.0	09/04/09 14:39	CLA
Nitrate	Calc.	2.9 mg/L	0.1	09/01/09 9:09	LMT
Nitrate+Nitrite	SM18/4500-NO3 F	2.9 mg/L	0.1	09/03/09 12:55	LMT
Nitrite	SM18/4500-NO2 B	< 0.05 mg/L	0.05	09/01/09 9:09	LMT
Phosphorus, Total	SM18/4500-P E	0.08 mg/L	0.01	09/04/09 10:22	LMT
Total Organic Carbon (TOC)	SW9060	2.1 mg/L,	1.0	09/08/09 9:46	NBA

Sample I.D.: SC-OP-MWL6

Laboratory Sample I.D.:

09080612-006

Date/Time Sampled: 08/31/09 Parameter	14:15 Method	Sample Results	Rep Limi	Analysis Date/Time	Analyst
E. Coli	Colifert 18/QT	< 1 mpn/100mL	1	08/31/2209 17:00	ETS
Aluminum	SW6010C	7.19 mg/L	0.050	09/08/09 14:25	MWL
Copper	SW6010C	< 0.01 mg/L	0.010	09/08/09 14:25	MWL
Silver	SW6010C	< 0.01 mg/L	0.010	09/08/09 14:25	MWL
Ammonia	EPA350.1/R2.0	< 0.1 mg/L	0.10	09/02/09 11:25	LMT
Chlaride	EPA300.0/R2.1	9.6 mg/L	1.0	09/03/09 20:04	CLA
Nitrale	Calc.	1.2 mg/L	0.1	09/01/09 9:09	LMT
Nitrate+Nitrite	SM18/4500-NO3 F	1.2 mg/L	0.1	09/03/09 12:58	LMT
Nitrite	SM18/4500-NO2 B	< 0.05 mg/L	0.05	09/01/09 9:09	LMT
Phosphorus, Total	SM18/4500-P E	< 0.01 mg/L	0.01	09/04/09 10:22	LMT
Total Organic Carbon (TOC)	SW9060	1.8 mg/L	1.0	09/08/09 9:46	NBA



Certificate of Analysis

Final Report

Laboratory Order ID 09080612

Client Name: Swift Creek Environmental, Inc.

Date Received:

August 31, 2009 · · ·

8201 County Drive

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September 08, 2009

Disputanta, VA 23842

Submitted To: Tom Houghton

Project Number:

06-012

Client Site I.D.: Omega Protein Lagoon Monitor Wells

Purchase Order:

06-012

Ted Soyars

Laboratory Manager

The test results listed in this report relate only to the samples submitted to the laboratory and as received by the Laboratory.

Unless otherwise noted, the test results for solid materials are calculated on a dry weight basis. Analyses for pH, dissolved oxygen, temperature, residual chlorize and sulfite that are performed in the laboratory do not meet NELAC requirements due to extremely short holding times. These analyses should be

The signature on the final report certifies that these results conform to all applicable NELAC standards unless otherwise specified. For a complete list of the Laboratory's NELAC certified parameters please contact customer service.

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LABORAT	ORIES, IN	ic.					CH	IAI	N O	F CI	U\$	11.00								PAGE	0	<u> </u>
CLIENT NAME: Swift	Cree		14.15									PR	OJE	ECT N	ME;	OMe	94	Prot	ein			
CLIENT CONTACT: Tom	19074	ughte	·Λ '									71677		IAME:		600		Organization of the last	for	we	حاا	
CLIENT ADDRESS: 380		vtruco	Dr.						č –			PR	OJE	ECT N		R: 0(
CLIENT PHONE NUMBER:	191-	3219										P.O), N	UMBE	R: <i>∢</i>	70 - E	12					
CLIENT FAX NUMBER: 99	1-0	194	EMAIL:		,											THORIT						
Is sample for compliance repo)		is sam	ple f	rom	ac	hlorii	nated	d su	pply	?	YES	(NO	\sim	PWS I	.D. #:				,
SAMPLER NAME (PRINT):	B.	Keith	EAH	DΩ	SAMP	LER	SIG	SNA			3	Id		H	5		Turn A	Around	Time:	5	Da	y(s)
Have ammonia and TKN samples been ve	rified to be d	echlorinated	at the time of	sampling?:	YES	N	10			MAT	TRE	X			ANA	LYSIS	/ (PRES	SERVA	TIVE)		COMM	ENTS
CLIENT SAMPLE I.D.	Composite Start Date	Composite Start Time	Grab Date or Composite Stop Date	Grab Time or Composite Stop Time	Number of Containers	Grab	Composite	Field Filtered (Dissolved Metals)	Ground Water / Surface Water Waste Water / Storm Water	king Water	Soil	Solids	Other	E-Coli	Chloride	RIUMINUM PRISZERD	AmmoniA Ph= CZ	25589 PRATIN	TOTAL PASSA	Joh	Quote I.D.: PLEASE PRESERVA' PUMP RAT	NOTE TIVE(S) or
1)5C-0P-MWLL			83109		4	X			\angle			Ц		X	X	X	X	X	X	X		
2)5C- 0P-MWL2				1305	10	X		1	XL	\perp		\sqcup	_	X	X	1×	X	LX.	X	<u> </u>		
3)5C- OP-MWL3				1335	10	X			Ķ_					X	X	X	X	X	LX.	X		
4)5C- OP-MWL4				1225	10	X			X_				_	X	<u>_X</u> _	X	X	X	X	X		
5)5C- OP- MULS				1350	4	X	_		X.	L	Ш		_	X	×	X	X	X	X	X		
6)SC-OP-MUL4			A	1415	4	X	\sqcup	_					_	X	X	X	X	X	X	×		
7)					- 17	Ш		_					_									
8)						Ш						Ц										
9)									_													
10)					<u></u>	Ц	Ц				Ш	Ш	_1		1 .						1 1	
RELINQUISHED:	8/31/0	7 TIME 9 490 7 TIME	RECEIVED:	СЛ	Mi	4	, 8·	31	/ TIM	30	L	Data 1 (eve. 11 leve.		ackage	ī	JSE ON	LY	C	0908		—-,	2_°C
RELINQUISHED:	DATE	/ TIME	RECEIVED:	-			Ĉ	DATE	/ TIM	E		evel II		0		mega Prol			DUE: Recd:	5 Day 08/31/0		ric
																					319.7	



		SCE			e S
	Sample Conditions Checklist a by: (print) ANCOULY Lab ID No.:	Omega Protein L	agoon Mo	Og nito DU Reci	080612 E: 5 Days
	d by: (print) A MC Lab ID No.: Date Cooler Opened:	8-3	1-00	6 g	inug
(sign)	Date Cooler Opened:				•
1.	How were samples received? Fed Ex UPS Courier Walk ln		<u>YES</u>	NO	<u>N/A</u>
2.	Were custody seals used?	e			\square
3.	If yes, are custody seals unbroken and intact at the date and time of arrival?				13/
4.	Are the custody papers filled out completely and correctly?	(365) (365)			
5.	Do all bottle labels agree with custody papers?		Ø		
6.	Are the samples received on ice?				
7.	Is the temperature blank or representative sample within acceptable limits? (4 degrees Celsius +/-2)				
8	Are all samples within holding time for requested tests?		\square		
9	Is a sufficient amount of sample provided to perform the tests indicated?				
10	Are all samples in proper containers for the analyses requested?		Ø		
11	Are all samples appropriately preserved for the analyses requested?		\square		
12	Are all volatile organic containers free of headspace?				Ø
	<u>COMMENTS</u>	7/47			
-					ž
				ne.	

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Client: Omega Protein
Project ID: OMEG0903
Client Sample ID: Outfall 001
Permit No: VA0003867

Sample Period: 9/15/09 to 9/18/09

Coastal Bioanalysts, Inc.

Report of Analysis: Whole Effluent Toxicity (WET)

Submitted To:
Mr. Ted Schultz
Regulatory Compliance Officer
Omega Protein
P.O. Box 175
Reedville, VA 22539

Prepared By:
Coastal Bioanalysts, Inc.
6400 Enterprise Court
Gloucester, VA 23071
(804) 694-8285
www.coastalbio.com

Contact: Peter F. De Lisle, Technical Director

Acute Test Results				
Species-Test Method	48-h LC50	95% C.L.	T.U. _{Ac}	NOAEC
M. bahia EPA 2007.0	>100	N/A	<1.00	N/A
C. variegatus EPA 2004.0	>100	N/A	<1.00	N/A

Chronic Test I Species- Test Method	Endpoint	NOEC	LOEC	ChrV	PMSD	T.U.c	IC25	48-h LC50	LC50 95% C.L.	T.U.A.
M. bahia	Survival	100	>100	>100	N/A	1.00	N/A	>100	N/A	<1.00
EPA 1007.0	Biomass	100	>100	>100	23	1.00	>100	N/A	N/A	N/A
D171 1007.0	Fecundity	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
C. variegatus	Survival	100	>100	>100	N/A	1.00	N/A	>100	N/A	<1.00
EPA 1004.0	Biomass	100	>100	>100	18	1.00	>100	N/A	N/A	N/A

Note: Details regarding test conduct and data analysis provided in attached bench sheets and printouts as applicable. Although the name of *Mysidopsis bahia* has officially been changed to *Americamysis bahia*, the former name is referenced because of its use in the EPA method manuals and most NPDES permits.

Acute Test Biological Summ	ary Data			Sample	Concentra	tion (%)	
Species-Method	Endpoint	Control	3.50	7.00	14.0	28.0	100
M. bahia EPA 2007.0	Survival (%):	100	100	100	100	100	100
C. variegatus EPA 2004.0	Survival (%):	100	100	100	100	100	100

Chronic Test Biological Sum	mary Data			Sample	Concentra	tion (%)	
Species-Method	Endpoint	Control	0.50	0.90	1.80	3.60	100
M. bahia EPA 1007.0	Survival (%):	95	93	100	95	93	98
M. banta El A 1007.0	Biomass (mg)	0.313	0.305	0.367	0.370	0.337	0.392
	Fecundity (%):	27	45	33	32	25	26
C. variegatus EPA 1004.0	Survival (%):	100	100	100	100	98	100
C. Varteguius ETA 1004.0	Biomass (mg):	1.020	1.146	1.059	0.993	1.014	1.020

Client: Omega Protein
Project ID: OMEG0903
Client Sample ID: Outfall 001
Permit No: VA0003867

Sample Period: 9/15/09 to 9/18/09



Coastal Bioanalysts, Inc.

Test Information Species-Method	Start Date/Time End Date/Time	Organism Source	Hatch/Harvest Date/Time	Acclimation Temp.	Acclimation Water	Test Aerated?
M. bahia EPA 2007.0	9/17/09 1500 9/19/09 1450	CBI Stock	9/15/09 1100 9/16/09 1100	25° C	HWM ASW 20 g/kg sal.	Yes
C. variegatus EPA 2004.0	9/17/09 1510 9/19/09 1500	CBI Stock	9/5/09 1200 9/6/09 1200	25° C	HWM ASW 20 g/kg sal.	Yes
M. bahia EPA 1007.0	9/15/09 1215 9/22/09 1255	CBI Stock	9/7/09 1000 9/8/09 1000	25° C	HWM ASW 20 g/kg sal.	Yes
C. variegatus EPA 1004.0	9/15/09 1200 9/22/09 1215	CBI Stock	9/14/09 1630 9/15/09 1030	25° C	HWM ASW 20 g/kg sal.	Yes

Sample/Dilution Water Data	Acut	e Test		Chron	ic Test	
Sample/Difficion viaces 2 acc		Dilution	Sar	nple	Dilutio	n Water*
Water Quality Parameter (Units)	Sample	Water	Mean	Std. Dev.	Mean	Std. Dev.
Arrival Temperature (°C)	2	N/A	3	1.5	N/A	N/A
Use Temperature (°C)	25	26	26	0.5	25	0
Arrival Salinity (g/kg)	16	N/A	16	0	N/A	N/A
Use Salinity (g/kg)	20	20	20	0.5	20	0.5
pH (S.U.)	7.26	7.71	7.28	0.14	7.88	0.09
Dissolved Oxygen (mg/l)	6.2	7.3	4.7	2.0	7.3	0
Total Hardness (mg/l as CaCO ₃)	2980	N/A	2913	70	N/A	N/A
Alkalinity (mg/l as CaCO ₃)	106	N/A	102	3.8	N/A	N/A
Total Residual Chlorine (mg/l)	<q.l.< td=""><td>N/A</td><td><q.l.< td=""><td>0</td><td>N/A</td><td>N/A</td></q.l.<></td></q.l.<>	N/A	<q.l.< td=""><td>0</td><td>N/A</td><td>N/A</td></q.l.<>	0	N/A	N/A
Ammonia (mg/l NH ₃ -N)	2.7	N/A	3.1	0.3	N/A	N/A

Dilution water = Hawaiian Marine Mix ASW made with deionized water

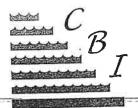
CBI Sample	se/Pretreatment Collection Date/Time	Date(s)/Time(s) 1 st Used in Tests	Date(s)/Time(s) Used in Renewals	Sample Adjustments
OMEG0903-A	9/15/09 0700	9/15/09 1200, 1215	9/16/09 1120, 1140	Salt Added
OMEG0903-B	9/17/09 0715	9/17/09 1315, 1330 9/17/09 1500, 1510	N/A	Salt Added Aerated 0-3 min
OMEG0903-C	9/18/09 0715	9/18/09 1150, 1200	9/19/09 1355, 1405 9/20/09 1125, 1140 9/21/09 1020, 1030	Salt Added, Aerated 0-4.5 min

*Acute tests

	ute Test Water Quality (Mean/Std. Dev.) Test: M. bahia 2007.0							C. variegatus 2004.0				
% Conc:	Cont.	3.50	7.00	14.0	28.0	100	Cont.	3.50	7.00	14.0	28.0	100
Temp.	25	25	25	25	25	25	25	25	25	25	25	25
(°C)	0	0	0	0	0	0	0	0	0	0	0	0
D.O.	7.2	7.1	7.1	7.1	7.0	6.7	7.1	7.1	7.1	7.0	7.0	6.6
(mg/l)	0.1	0.1	0.1	0.1	0.1	0.6	0.2	0.1	0.1	0.1	0.1	0.6
pH	7.91	7.89	7.91	7.93	7.93	7.90	7.92	7.89	7.91	7.80	7.93	7.83
(S.U.)	0.07	0.09	0.11	0.13	0.16	0.33	0.08	0.10	0.13	0.28	0.18	0.3

Client: Omega Protein Project ID: OMEG0903 Client Sample ID: Outfall 001 Permit No: VA0003867

Sample Period: 9/15/09 to 9/18/09



Coastal Bioanalysts, Inc.

hronic Test Water Quality (Mean/Std. Dev.) Test: M. bahia 1007.0							C. variegatus 1004.0					
% Conc:	Cont.	0.50	0.90	1.80	3.60	100	Cont.	0.50	0.90	1.80	3.60	100
Temp.	25	25	25	25	25	25	25	25	25	25	25	25
(°C)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
D.O.	7.0	6.9	6.9	6.8	6.8	6.1	7.0	7.0	6.9	6.9	6.8	6.0
(mg/l)	0.3	0.4	0.4	0.4	0.5	0.8	0.3	0.3	0.3	0.3	0.4	0.8
pH	7.77	7.75	7.76	7.74	7.78	7.69	7.70	7.72	7.72	7.73	7.71	7.58
(S.U.)	0.13	0.08	0.10	0.18	0.10	0.18	0.08	0.09	0.08	0.09	0.16	0.22
Salinity	20	20	20	20	20	20	20	20	20	20	20	20
(g/kg)	0.4	0.4	0.4	0.4	0.4	0.6	0.4	0.4	0.4	0.4	0.4	0.6

Species-Method (Ref. Test Date)	Data Source	% Control Survival	48-h LC50	rganism Source: CBI 95% C.L./A.L. for LC50	RTT in Control?
M. bahia 2007:0	RTT	100	526	481-576	Yes
(9/8/09-9/10/09)	CC	100	610	504-716	
C. variegatus 2004.0	RTT	100	1112	997-1239	Yes
(9/8/09-9/10/09)	CC	99	1094	925-1263	

Chronic Test QA/QC Species-Method	Data		urvival	Chita	Units: mg/l Test Organism Source: CBI Stock Biomass (mg)				
(Ref. Test Date)	Source	Cont	NOEC	Cont.	NOEC	PMSD	IC25	IC25 A.L.	Control?
M. bahia 1007.0	RTT	90	250	0.36	250	29	349	N/A	Yes
(9/8/09-9/15/09)	CC	93	250	0.32	250	22	484	341-628	
C. variegatus 1004.0		98	1000	1.45	500	12	1069	N/A	Yes
(9/8/09-9/15/09)	CC	99	1000	1.26	500	14	954	611-1298	

Note: RTT = Reference Toxicant Test, CC = Control Chart, Cont. = Control group. Based on control chart data (n>62) fecundity (Method 1007.0) is not a sensitive endpoint for KCl toxicity and hence not reported; fecundity data available upon request.

The results of analysis contained within this report relate only to the sample as received in the laboratory. This report shall not be reproduced except in full without written approval from the laboratory.

APPROVED:

Peter F. De Lisle, Ph.D.

Technical Director

GLOSSARY OF TERMS AND ABBREVIATIONS

A.L. (Acceptance Limits): The results of a given reference toxicant test are compared to the control chart mean value ± 2 standard deviations. These limits approximate the 95% probability limits for the "true" reference toxicant value.

Chronic Value (ChrV): The geometric mean of the NOEC and LOEC. Units are same as test concentration units.

Page 3 of 4 Report Pages

Total No. Printouts/Bench Sheets Attached: 20

EPA Laboratory ID: VA01116

Client: Omega Protein Project ID: OMEG0903 Client Sample ID: Outfall 001 Permit No: VA0003867

Sample Period: 9/15/09 to 9/18/09

中心,这个人的现在分词

Coastal Bioanalysts, Inc.

C.L. (Confidence Limits): These are the probability limits, based on the data set and statistical model employed, that the "true value" lies within the limits specified. Typically limits are based on 95% or 99% probabilities.

Control chart: A cumulative summary chart of results from QC tests with reference toxicants. The results of a given reference toxicant test are compared to the control chart mean value and 95% Acceptance Limits (A.L.) (mean ± 2 standard deviations).

IC25: The concentration of sample or chemical, calculated from the data set using statistical models, causing a 25% reduction in test organism growth, reproduction, etc. The lower the IC25, the more toxic the chemical or sample. Units are same as test concentration units.

LC50: The concentration of sample or chemical, calculated from the data set using statistical models, causing a 50% reduction in test organism survival. The lower the LC50, the more toxic the chemical or sample. Units are same as test concentration units. Note: The LC50 value must always be associated with the duration of exposure. Thus 48-h LC50, 96-h LC50, etc. are calculated.

LOEC: Lowest-observable-effect-concentration. The lowest concentration of sample or chemical in a chronic test dilution series in which the test organisms exhibit a statistically significant reduction in any of the test end points (e.g. growth, survival, reproduction) compared to control organisms. Units are same as test concentration units.

PMSD: Percent Minimum Significant Difference: The minimum difference which can exist between a test treatment and the controls in a particular test and be statistically significant; a measure of test sensitivity. The lower the PMSD the more sensitive the test.

N/A: Not applicable.

N/D: Not determined or measured.

NOAEC: No-observable-acute-effect-concentration. The highest concentration of sample or chemical in an acute test dilution series in which the test organisms exhibit no statistically significant reduction in the test end point (e.g. survival) compared to control organisms. Units are same as test concentration units.

NOEC: No-observable-effect-concentration. The highest concentration of sample or chemical in a chronic test dilution series in which the test organisms exhibit no statistically significant reduction in any of the test end points (e.g. growth, survival, reproduction) compared to control organisms. Some regulatory definitions also require that the NOEC be less than the LOEC. Units are same as test concentration units.

Q.L.: Quantitation Limit. Level, concentration, or quantity of a target variable (analyte) that can be reported at a specified degree of confidence.

T.U.: Toxic units. Expresses the relative toxicity of an effluent in such a manner that the larger the toxic unit value the more toxic the effluent. T.U._{Ac} = 100/LC50. T.U._{Ctr} = 100/NOEC. A dimensionless unit.

Page 4 of 4 Report Pages
Total No. Printouts/Bench Sheets Attached: 20

EPA Laboratory ID: VA01116

Species: Mysidopsis (Americamysis) bahia

% Effluent	I.D.	Day 0 Live	Day 1 Live	Day 2 Live	Final % Survival
Lab	C-A	10	10	10	
Control	_C±B_	-(-o-	-10	10-	_L0.0
	1-A	(0	10	D	
3.50	1-B	10	10	10	(00)
	2-A	[O	10	(0	
7.00	2-B	ĺo	10	(D)	100
	3-A	10	10	16	
iy,D	3-B	10	10	10	100
600	4-A	10	10	10	
28.0	4-B	10	10	10	100
100	5-A	10	10	10	
100	5-B	13	10	(O)	100
lr.	Initials: Count Time:		PB	PB	
Count			0700	1450	*Tést End Time

Parameter	Treatment I.D.	Day 0	Day 1	Day 2
	С	25	<i>5</i> 5	25
Temp.	1	75	25	25
(°C)	2	25	25	25
Ì	3	25	25	25
.s	4	75	źs	25
	5	25	25	25
	С	7.93	7.97	7.93
рН	1	7.80	7.98	7.88
(S.U.)	2	7.73	7.99	7.95
	3	7.78	8.04	7.97
	4	7.74	8.05	7:99
	5	7.52	8.07	8.10
	С	7.3	7.1	7.1
D.O.	1	7.2	7.1	7.0
(mg/l)	2	7.2	7.1	7.1
	3	7.1	7.0	7.1
	4	7.0	7.0	7.1
	5	6.00	7./	7.1
	С	20		21
Salinity	1			
(g/kg)	2			
	3			
	4			
	5	20		21
Replicate M	easured:	A	B	P
	Initials:	80	PB.	bizer
TRC (m	a/I) in highest	conc. at end-o	f test:	NA

2	Source: CBI stock cultures						
	Other:						
	Harvest: Date/time start: 4/15/09 1100						
	Date /time end: 9/14/09 1100						
	Acclimation: Water: ASW 20 g/kg salinity						
	Other						
	Temperature (°C): 25						
	Feeding: Prior to test: Artemia ad libitum During test: Artemia nauplii ca. 100 /mysid/day						
	Illumination: 16L:8D 10-20 uE/m²/s						
	Test chamber size:400 ml250 ml						
	Solution volume:200 mlml						
	Number of replicates/treatment: 2						
	Initial number of mysids/replicate: 10						
	Set up: Date (Day 0): 9/17/09						
	Time water added: 1 4.45						
	Time mysids added:(SOO						
	Set up by (initials):						
	NOTES: (1) D.D. propped to 4.1 Test Apraded @ 1600. RB						

CYPRINODON VARIEGATUS STATIC ACUTE WET TEST 48-H TEST (ACV) FORM ETF1021E

% Effluent	I.D.	Day 0 Live	Day 1 Live	Day 2 Live	Final % Survival
Lab	C-A	10	10.	10	
Control	-G-B-	10	10	(0	1.00
	1-A	(0	10	10	
3,50	1-B	10	10	10	100
n	2-A	10	10	(0	1.00
7.00	2-B	10	10	10	100
	3-A	10	10	(0)	
14.0	3-B	10	(D	[0	100
_	4-A	10	10	ĮΟ	32
28.2	4-B	10	10	(3)	100
14/14	5-A	10	10	10	
1110	5-B	10	10	10	100
	nitials:	85	PB	PB	. ۔ . د
Count Time:		1510	0905	1500	*Test End Time

Parameter	Treatment I.D.	Day 0	Day 1	Day 2	
C) Ciliano	С	25	75	25	
Temp.	1	25	25	25	
(°C)	. 2	25	25 ,	25	
	3	25	75	25	
	4	>5	25	25	
	5	2.5	25	25	
	С	7.83	7-99	7 1994	
рΗ	1	7.80	8.00	7.88	
(S.U.)	2	7.78	8-03	7,93	
	3	7.78	8.09	7.54	
	4	7.74	8.10	7.94	
	5	7.52	8-10	8.01	
	С	7.3	7-0	7.0	
D.O.	1	7,2	7.6	7.1	
(mg/l)	.5	7.2	7.1	7.1	
	3	7.1	6-9	657	
	4	70	6.9	1,1	
	5	6.00	6.9	7.0	
	С	20		21	
Salinity	1				
(g/kg) [*]	2				
	3			and the second	
	. 4				
	5	20		21.	
Replicate I	Measured:	TA	B.	I A	
	Initials:	PB	RB	bje	
TRC (r	na/l) in highes	t conc. at end	of test:	NA	

COASTAL BIOANALYSTS, INC EFFECTIVE DATE::2/1/09

Species: Cyprinodon variegatus
Source: CBI stock cultures
Other:
Hatch: Date/time start: 9/5/09 1200
Date /time end: 9/6/09 /200
Acclimation: Water: ASW, 20 g/kg salinity
Other
Temperature (°C): 25
Feeding: Prior to test: Artemia ad libitum During test: Not fed
Illumination: 16L:8D 10-20 uE/m²/s
Test chamber size:400 mlml
Solution volume:400 ml ml
Number of replicates/treatment: 2
Initial number of fish/replicate: 10
Set up: Date (Day 0): 9/17/09
Time water added: 1445
Time fish added:1510
Set up by (initials):
D.O. dropped to 4.0 Aeration State at @ 1600.
7,0
P/ -
4
£-
x x x x x x x x x x x x x x x x x x x
% <u>*</u>

BASELINE TEST INFO - MYSID 7 DAY TEST

Coastal Bioanalysts, Inc Form ETF0011D Effective Date: 2/1/09

TEST ORGANISM INFO

Species:	Mysidopsis (Americamysis) bahia	Acclimation:	Water: ASW-20-g/kg-salinity
Source:	CBI Stock Cultures:	e 0	Other:
	Other:	8 3	Temp. (°C): 25
Harvest Date/Ti	me: From 9/7/09 (006	Feeding Prior to	Test: Artemia ad libitum 2X/day
27	To 918/09 1000	Feeding During	Test: Artemia ca. 75/mysid, 2X/day
		Arrival Date: (non-CBI)	
TEST DESIGN			
Test Chamber:	1000 ml Tri-pour Beaker	Illumination:	16:8 L:D 10-20 uE/m²/s
	Other	Number of Rep	licates/Concentration: 8
Solution Vol:	200 ml	Initial Number o	of Mysids/Replicate: 5
	Other	ê.	ŷ.
TEST SET UP (Day 0)		
Set Up Date:	9/15/09	Time Water Add	led:
		2	:015
Set Up By:	PB	Time Animals A	Added: 13-15
Set Up By:	PB	Time Animals A	Added: 1913
	PB		
	2		
	2		
	2	<i>r</i> .	

Para- meter	Treat-1	Day 0 Initial	Da Final	y 1 Initial	Da Final	y 2 Initial	Da Final	y 3 Initial	Day Final	y 4 Initial	. Day Final	y 5 Initial	Day Final	y 6 Initial	Day 7 Final
T	C	24	75	76	75	25	25	26	25	20	25	25	25	25	25
E	1	26	25	26	25	75	25	i4	25	24	25	25	25	25	2:5
M	2	26	25	26	25	75	25	24	25	20	35	25	25	25	25
P	3	26	75	24	25	25	25	26	25	26	25	25	25	25	25
	4	26	25	26	23	25	25	26	25	26	25	25	25.	25	25
(oc)	5	26	25	26	25	25	25	7.5	25	26	25	25	25	2.5	25
	С	7.86	7.47	7-70	7.48	7.72	7.87	7.79	7-80	והר	7.84	2.22	7.43	7.89	2.99
.pH	1	7.86	7-42	7-70	768	7.72	7.87	7.78	7.62	וריר	7.23	7.84	2.26	2.8.3	7.83
	2	7.86	7.42	7-76	7-69	7.72	7-87	7 79	7.68	7-71	7.80	2.85	2.61	7.88	7.91
(S.U.)	3	7.86	7-60	7.70	7.69	7.72	7.88	7.81	1.68	7.22	7.83	2.81	2.68	7.90	7.94
	- 4	7.86	7.01	7.70	7.49	7.72	7-90	7.76.	7.86	7.72	2.81	7.81	2.48	2.83	7.92
	5	7.49	7.78	7.51	7-25	7-40	7.96	7.26	7.88	7.39,	7.28	7.67	7.74	7.67	7.83
	С	7-3	Q.4	7.0	4.3	7.0	7.1	2.3	7.0	ادن	7.1	7.2	7.1	7.1	2.1
D.O.	1 ,	7.3	(e.4	7.0	4.2	7.0.	7.1	12	6.0	7./	7-1	22	7.1	2.0	2.1
	2	7.2	4.0	7.0	4.0	7.0	7.0	21	6.4	74	7.0	12	7.1	4.8	20
(mg/l)	3	7.2	6.3	7.0	4.0	7.0	69	6.6	6.4	7./	49	2.2	2.1	4.4	2.0
	4	7.2	6.3	4.2	3.7	7.0	6.8	6,9	てみ	7-1	4.8	7.1	2.1	4 13	4.5
	5	6.2	6.1	5-3	5.3	4.30	6-7	5,2	6.8	J.6	44	2.0	7.1	2013	4.8
S	C		20		30		21		20		20		20		20
Α	1 .		70		20		21	探告教授部 認	20		A.G		20		24
L	2		70		20		21		20		24	SM H	20		24
1	3		20		20		21		20		24		96		No. Col.
N	4		20		20		21		20		26		20		<u>∂</u>
(g/kg)	5		20		20		21		2D		20		19		96
	plicate:	A	ß	e	[- l	B	G	6	E	B	C	0	A	B	£
	Initials:	PB	.PB	PB	PB	PB	PB	100	laig !	PB	CA	CB	LB	C6:	GB

O DO Dropped to 2.8 HOD. PB

Coastal Bioanalysts, Inc Form ETF0013C Effective Date: 11/27/07

Treatment C	—-A-	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7		1
С		_5	-5-	5	-5 '5	4	<u> </u>	4		
	В	<u>5</u> 5	5 .	3		5.	5	5		,
	С	5	5	15.	3	5.	5	5		
	D	う 5	5	1	5 1	5	5	5		
	E	5		1		5	5	5	95	
	F	3	5 5	1	<u>S</u>	5	5	4		
	G	5 5 5		5	5	5	3	5		
	H	-	5	1	-		5	(
				5	5	5	5	40		1
	A B	5 5 5 5	=======================================	1	5	5		5	1	
1			<u> </u>	-			5	5	1	
- MAG	С		-	1	5	-	5-	1	1	
0.5090	D			15,	5	5	5	5	93	J.Sacr
% Conc.	E	>	5	5	_5	5		5	Η΄	C
,	F	5	5		5	15	5		1	1) Ale of
6	G	5	1 - 2 -	5	S	2	5	5	-	20-1.
Vol. Spl.	Н	5	5	3	S	5	5	4		JSAME Side of Sea Ee
	Α	5 .S	5	5	5		5	5	4	
2	В	.5	5'	5	1 5	5	5	5	1	
_	C	V	5	5	5	5	5	5		
47 OP,C	D	S S	5	1	5	5	5	5		
% Corp	E	5	S	5	3	5	5	5	100	i
% Conc.	. F	=	5	1	5	5-	-5-	5	1 '	1
100		5		5		5	5	5-		1
10.8	G	2	5	3	5	5	5	5		
Vol. Spl.	Н	_5	S					4	-	1
	Α	5		5	5	4	4		4	*
3	В	5	3	5		4	4	4	-	1
CO. BOSTO POWER	С	5	3	5	5	5	5	5-	4	1
1.80%	D	_5	3	3	5		5	5.	95	1
% Conc.	E	5 5 5	5	5	5	5	1	5	1 /	12
70 00	F	5	5	,	5	5	5	5		1
21,6	G	3	5	°5,			5	5		
Vol. Spl.	H		3	3	5	5	5	5		1
Vol. Spi.		5 5 5	3	3	5	5	40	4		
	A		3	1	1 5	1	5	5-	7	1
4	В			-	5	3	5,	4	7	A
	С	5 5	5	3	5	C ₁	3	4	1	
3,60046	D	5	5	1			5	1	93	1
% Conc.	E		× 5	15	5	5	-	. 5	1 ′	
	F	5 5 5		5	5	1 5	5 5		1	
43.2	G	5	5	1_5	>	5	13	5	-{	
Vol. Spl.	Н	5	5	5	5	5		-		-
	Α	5	5	5	5	5	5	5		1
5	В	5	5	5	5	5		4	4	1 .
	C	5 5	5	<	5 5 5	5	5	5	4	1
12040_	D	1	-	3	2	5	8	5	98	1
			5 5	3	5	49	5	5	1 / 5	1
% Conc.	Ę.	5	1-5-	3	5	3	5 5 5	50	1	
8 8 10 ¹	F	2	<u> </u>	13	1 2		É	5	7	
1990	G	5	5	1 3	5	5	5	12	7	Į.
Vol. Spl.	Н	5	3		5	+)		7	A SOUTH COME	9
Renewal/Co	unt Time:	1140 PB	1330 4B	1000	1405 PB	1140 CB	1030 CB	1255		

Volume sample added to total volume of _/ > \(\text{L} \) _ml for preparation of dilutions. * Time of final count = test end time.

ast I D	OMEGOG 03	-CME
est I.D.	aw Ford on	CIMI

Coastal Bioanalysts, Inc Form ETF0014G Effective Date: 10/31/08

			Camples		Imma-	Pan	Total ¹	Tare
	Rep	Females	Females	Males	ture	No.	Wt (mg)	Wt (mg)
Treatment	Ltr	w/eggs	No eggs	า	ture	110.	8.22	4-26
	A		_11			4	7.92	6.58
С	В		11/			3	7.27	5,90
	С		1 11	-(1)				4,48
	D		.111	11,	ļ	4	8.39	7.20
	E	U		17 %		5	8.48	232
	F		-17			2	9.44	7.21
İ	G	pi	11				8,41	4.94
	Н		(1)	1		8		8.41
	A		- ()	11			9.65	
1	В			111		10	8.59	
L	С	11		13		11	8.47	7.12
0,50	D	11	1			18	8.46	2.10
% Conc.	E		11	11		(3	8-73	5.98
l	F	- 1)	17	1		15	7.69	La.43
	G	11		11	ļ		8.27	7.55
	Н		111			140	8-48	5,45
	Α		1117	1		17_	7.26	
2	В	1	111	1		18	7.08	5.43
	С		111)		19	7.45	
D.90	D	1)	11)		24	9.20	7.14
% Conc.	E	1	17	17		5,	8.69	4.80
	F	1	17	17		73	10.21	8.15
	G	1111				21	10.10	7.6
	Н		1)	111		24	8.04	4.31
	A		- 11			25	8.53	4,88
3	В	- U	U			26	8.89	7.58
41.00	С	1	(1)]		22	10,22	2.48
1,80	D		1	17)	1	38	9.64	8.44
% Conc.	E		1,	111)		24	11.28	9.34
	F		u	17 ,		34	9.05	7.45
	G	11	1	17		31	8.68	4.40
	H			0		33	10.92	8.85
	Α			1)		33	9.37	7.84
4	В	11	1			34	10.23	8.32
	С	LU.	1	_\-\-		35	9.78	2.22
3,40	D		tur.			34	9.56	8.01
% Conc.	E	(111	11		32	9.64	8.08
	F	10 1	101	1		34	8.07	6.44
1	G		1	1111		39	10.79	7.18
	Н		111	1)		40	9.03	7.18
	Α	1				41	10.53	8.28
5	В			111		43	10,18	8.47
	С		MI			43	10.23	8.55
(151)	D		111	11		44	10.84	8.41
% Conc.	E		[11]	line service service		45	9.21	2.74
26.00 (0000000000000000000000000000000000	F		LUI_	11		46	10.43	8,50
1	G	111				42	10:21	7.44
1	H	111	1)		N. T.	48	10.50	8.37
ne printout of etal				hy replicate				

¹See printout of statistical analyses for biomass weights by replicate.
² True value <u>+</u> estimated uncertainty of calibration weight (NIST traceable annual certification) = <u>I I AAA</u> + <u>D.Q5</u> mg

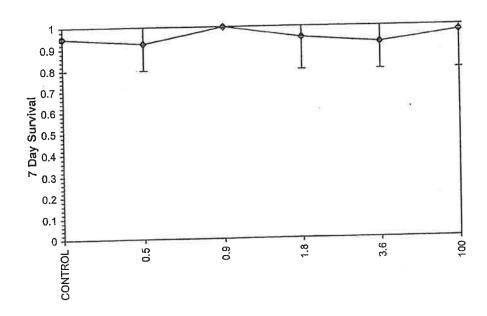
TARE WT: DATE: 4134 INITIALS: LA CALIB. CHECK (10.00 mg²): 10.44 CALIB. CHECK (10.00 mg²): 10.60 SEXED BY: CB

End Date: Sample Date:	9/15/2009 9/22/2009	12:55	Test ID: (Survival, OMEG090 CBI EPAM 94-	змв		Sample ID Sample Ty Test Speci	: pe:	OUTFALL 003 WW MY-Mysidopsis bahia
Comments:	4	2	3	4	5	6	7	8	
Conc-% CONTROL	0.8000	1,0000	1.0000	1.0000	1.0000	0.8000	1.0000	1.0000	
Value Market State of State	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	1.0000	1.0000	0.8000	1.0000	1.0000	1.0000	0.8000	
0.5 0.9		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
1.8	0.8000	0.8000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
3.6		1.0000	0.8000	0.8000	1.0000	1.0000	1.0000	1.0000	
3.0	1.0000	0.8000		1.0000	1.0000	1.0000	1.0000	1.0000	

			Tra	ansform:	Arcsin Sc	quare Root	*1	Rank	1-Tailed	
Conc-%	Mean	N-Mean	Mean	Min	Max	CV%	N	Sum	Critical	
CONTROL	0.9500	1.0000	1.2857	1.1071	1.3453	8.574	8			
ASSESSMENT OF THE COLUMN TO		0.9737	1.2560	1.1071	1.3453	9.813	8	64.00	46.00	
0.5	0.9250			1.3453	1.3453	0.000	8	76.00	46.00	
0.9	1.0000	1.0526	1.3453		1.3453	8.574	8	68.00		
1.8	0.9500	1.0000	1.2857	1.1071		_		64.00		
3.6	0.9250	0.9737	1.2560	1.1071	1.3453	9.813	8	_		
100	0.9750	1.0263	1.3155	1.1071	1.3453	6.400	8	72.00	46.00	
50										

					Statistic	Critical	Skew	Kurt
Auxiliary Tests			4-0.041	_	0.77039	0.929	-1,0511	-0.4334
Shapiro-Wilk's Test indicates non	-normal di	stribution (p <= 0.01)	Ŕ	0.11000	0.020		
Equality of variance cannot be co	nfirmed							
Hypothesis Test (1-tail, 0.05)	NOEC	LOEC	ChV	TU				
Steel's Many-One Rank Test	100	/>100		1			.,.	

Dose-Response Plot

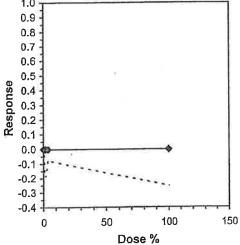


								-4 Diam			
TO 10-1-	014510000	10.15		oMEG090		n and Fe	cundity Te Sample ID		OUTFALL 003		
Start Date: End Date:	9/15/2009			CBI	SIVID		Sample Ty		ww		
Sample Date:	-,		Protocol:	EPAM 94-	EPA Mari	ne	Test Speci	ies:	MY-Mysidopsis	bahia	
Comments:											
Conc-%	1	2	3	4	5	6		8			
CONTROL	0.2920	0.2680	0.2740	0.2820	0.3540	-0.2920	0.4460	0.2940			0.50
0.5	0.2480	0.2660	0.3100	0.3120	0.4040	0.3420	0.3680	0.1860			
0.9	0.2620	0.2880	0.3440	0.4080	0.3740	0.4120	0.4980	0.3460			
1.8	0.3300	0.3220	0.4480	0.3200	0.3840	0.3200	0.4160	0.4200			
3.6	0.3020	0.3820	0.3020	0.3100	0.3120	0.2860	0.4300	0.3700			
						0.3860	0.4540	0.4260			

•				Transform: Untransformed					1-Tailed			Isotonic	
	Conc-%	Mean	N-Mean -	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD	Mean	N-Mean
_	CONTROL	0.3128	1.0000	0.3128	0.2680	0.4460	19.154	8				0.3471	1.0000
	0.5	0.3045	0.9736	0.3045	0.1860	0.4040	22,935	8	0.265	2.306	0.0718	0.3471	1.0000
	0.9	0.3665	1.1719	0.3665	0.2620	0.4980	20.405	8	-1.727	2.306	0.0718	0.3471	1.0000
4	1.8	0.3700	1.1831	0.3700	0.3200	0.4480	14.374	8	-1.839	2.306	0.0718	0.3471	1.0000
	3.6	0.3368	1.0767	0.3368	0.2860	0.4300	15.128	8	-0.771	2,306	0.0718	0.3471	1.0000
	100	0.3920	1.2534	0.3920	0.2940	0.4540	15.654	8	-2.546	2.306	0.0718	0.3471	1.0000

Auxiliary Tests					Statistic		Critical		Skew	Kurt
Shapiro-Wilk's Test indicates nor.	mal distribu	ition (p > 0	.01)		0.96204		0.929		0.30422	-0.3412
Bartlett's Test indicates equal var	iances (p =	0.92)	•		1.48277		15.0863			
Hypothesis Test (1-tail, 0.05)	NOEC	LOEC	ChV	TU	MSDu	MSDp	MSB	MSE	F-Prob	df
Dunnett's Test	100	>100		1	0.07176	0.22946	0.00963	0.00387	0.04645	5, 42

Linear Interpolation (200 Resamples) % >100 >100 >100 95% CL Skew SD Point IC05 IC10 IC15 >100 >100 >100 >100 0.9 IC20 IC25 IC40 8.0 0.7 >100 0.6 IC50



Mysid Survival, Growth and Fecundity Test-Biomass

Start Date: End Date:

9/15/2009 12:15

9/22/2009 12:55

Lab ID: CBI

Protocol: EPAM 94-EPA Marine

Test ID: OMEG0903MB

Sample ID: Sample Type: Test Species:

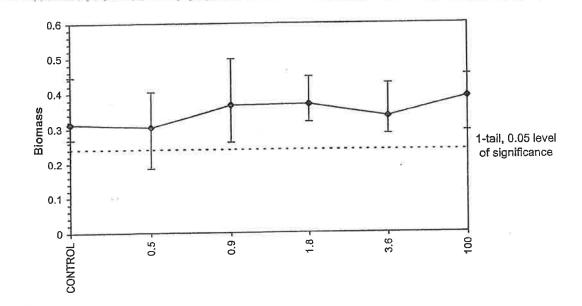
OUTFALL 003

ww

MY-Mysidopsis bahia

Sample Date: Comments:

Dose-Response Plot



			Mysi	d Surviva	I, Growth	and Fed	undity Te	st-Fecur	idity	
End Date: Sample Date:	d Date: 9/22/2009 12:5 imple Date: imments: Conc-% 1 2			OMEG090 CBI EPAM 94-I	ЗМВ		Sample ID Sample Ty Test Speci	: /pe:	OUTFALL 003 WW MY-Mysidopsis bahia	
	1	2	3	4	5	6	7	8		
CONTROL	0.3333	0.0000	0.0000	0.0000	0.6667	0.3333	0.6000	0.2500		7 R 5 R 8
0.5	0.0000	0.5000	0.6667	0.6667	0.3333	0.5000	0.6667	0.2500		
0.9	0.0000	0.2500	0.2500	0.5000	0.3333	0.3333	1.0000	0.0000		
1.8	0.3333	0.5000	0.2500	0.5000	0.0000	0.0000	0.6667	0.3333		
3.6	0.5000	0.5000	0.6667	0.0000	0.0000	0.0000	0.0000	0.3333		
100	0.5000	0.0000	0.0000	0.0000	0.2500	0.0000	0.7500	0.6000		

Conc-%	Mean	N-Mean	Transform: Arcsin Square Root						1-Tailed		
			Mean	Min	Max	CV%	N	t-Stat	Critical	MSD	
CONTROL	0.2729	1.0000	0.5679	0.2928	0.9553	44.737	8				
0.5	0.4479	1.6412	0.7421	0.3614	0.9553	30.081	8	-1.304	2.306	0.3081	
0.9	0.3333	1.2214	0.6245	0.2527	1.3181	51.891	8	-0.424	2.306	0.3081	
1.8	0.3229	1.1832	0.6371	0.2928	0.9553	31.971	8	-0.518	2.306	0.3081	
3.6	0.2500	0.9160	0.5579	0.2527	0.9553	48.969	8	0.074	2.306	0.3081	
100	0.2625	0.9618	0.5721	0.2255	1.0472	53.285	8	-0.032	2.306	0.3081	

Austliant Teate					Statistic		Critical			Kurt
Auxiliary Tests Shapiro-Wilk's Test indicates nor	0.95445		0.929			0.46306	-0.2352			
Bartlett's Test indicates equal var		2.05791		15.0863			9			
Hypothesis Test (1-tail, 0.05)	NOEC	LOEC	ChV	TU		MSDp	MSB	MSE	F-Prob	df
Dunnett's Test	100	>100	20000000	1	0.22328	0.77187	0.03846	0.07141	0.74584	5, 42
	NIA									

150% combit w/ eggs. 10.

BASELINE TEST INFO -- SHEEPSHEAD 7 DAY TEST

Coastal Bioanalysts, Inc Form ETF0021C Effective Date: 2/1/09

TEST ORGANISM INFO Water: ASW-20-g/kg-salinity_v Acclimation: Cyprinodon variegatus Species: Other: **CBI Stock Cultures** Source: Temp. (⁰C):__<u>-;-5</u> Other: Feeding Prior to Test: Artemia ad libitum 2X/day 1630 9/14/09 Hatch Date/Time: (start) Feeding During Test: Artemia 0.1 g/rep days 0-2 9/15/09 1630 Hatch Date/Time: (2X/day) 0.15 g/rep days 3-6 (end) Arrival Date: (non-CBI) **TEST DESIGN** 16:8 L:D 10-20 uE/m²/s Illumination: 1000 ml Tri-pour beaker Test Chamber: 4 Number of Replicates/Concentration: Other Initial Number of Fish/Replicate: 10 750 ml______ Solution Vol: Other_ TEST SET UP (Day 0) 1140 9/15/09 Time Water Added: Set Up Date: Time Animals Added: Set Up By: **NOTES**

Peer Review by PB (GR Date 9/28/09

Para- meter	Treat- ment	Day 0 Initial	Day Final	/1 Initial	Day Final	y 2 Initial	Da Final	y 3 Initial	Day Final	4 Initial	Da Final	y 5 Initial	Day Final	76 Initial	Day 7 Final
T	С	26	25	26	25	75	25	26	25	26	25	25	25	25	25
E	1	26	25	24	25	25	25	26	25	26	25	25	76	24	25
M	2	26	25	26	25	25	25	26	26	26	25	25	25	23	25
Р	3	26	25	26	25	25	25	u	25	2%	25	25	25	25	25
	4	24	25	26	25	25	25	24	25	26	25	25	25	25	25
(_o c)	5	26	25	21	25	75	25	25	25	26	25	25	25	25	35
1	С	7.82	7.64	7.17	7-44	7.69	7.73	7.76	7.78	7.73	2.41	7.11	7.51	2.78	2.43
pН	1	7.82	7.45	7-67	7.66	7-10	7-85	7.76	7.50	7,73	7.72	2.77	2.43	2.29	2.29
	2	7.82	7-62	7.47	7.46	7-70	7.86	718	2.77	7.73	7.42	2.29	2.44	279	7.70
(s.u.)	3	7.82	7.65	7-67	7.47	7-10	7.88	2.75	7.65	7.73	2.42	7.83	2.59	2.8-5	7.77
	4	7.82	7.46	7.47	7.67	7.70	7.90	7,79	7.82	7,73	7.32	7.83	7.45	7.57	7.46
	5	7.46	7.66	7.39	7-69	7.22	7.91	7.18	7,67	7.37	2.21	7.63	2.86	7.518	7.73
	С	7.3	Ce.2	7-0	6.8	7.1	71	7.3	6.8	7.1	7.)	7.2	21	7.1	7.0
D.O.	1	7-3	6.2	7.0	6.5	7.1	7.1	7.2	6.3	7-1	2-1	2.2	7.1	2.0	44
	2	7.2	(0.1	7.0	4.8	7.1	7.0	20	6.8	7.2	7.4	7.2	2.1.	48	4.9
(mg/l)	3	7.2	6.1	7_0	6.6	7.1	6.9	7.0	6.4	7.1	7.0	2.2	2.1	46	4.8
	4	7.2	6.0	6.2	4.0	7.0	6.8	6.9	7.1	7.2	4.8	7.1	7.1	40.4	74.8
	5	6.2	5.9	5.3	5.4	4.40	6.7	5,6	5.7	5.6	4.5	2.0	2.0	AMPRIORES TO SERVICE	4.7
S	С		20		28		21		20		20		20		20
A	1		20		20		21		20		AG		27		
L	2		20		20				20		20		96		28
1	3		26		20		21		20		28		24		9.9
N	4		2.0		20		21.		20		24	阿拉拉斯	20	SE MILES	700
(g/kg)	5		20		20		21		20		a A		-		20
Re	eplicate:	7 '	B	C	D	B	A	C	100	B	C	D	A	B	C
	Initials	RB	PB	RB	PB	PB	183	100	War	PB	C0	GB	LB	UB.	Co.

A.O. Dropped to 1.8.
acrosion stanted 1600 pB

_		Rep			Numb	er of Live	Fish	*********		Fish I	Dry Weight Da	ata (mg) ²	
	Treatment ¹	Ltr	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Pan #	Tot. Wt.	Tare Wt.	Notes
	*	А	10	10	16	10	10	10	10	44	19.83	9.44	
С	CONTROL	В	1.0	10	10	10	1A	10	10	541	16.36	7.50	
		С	10	(0.	fo	10	10	63	10	51	19.85	9.1)	N 1
		D	10	10	10	10	10	10	FO	5-2	20.38	9.52	
	a a) A	Α	10	1.0	10	{ 0'	10	20	10	53	17.76	7.52	940
1	C: 0,50%	В	10	10	69	10	10	25	10	54	18-88	2.02	
	1.0	С	10	10	10	10	10	10	00	5	19.21	7.88	
	V: 12	. D	D	10	10	10	10	10	1.0	56	20.39	7.82	
		A	170	1.0	10	10	10	(0)	10	52	17-59	7.12	
2	C:0.403h	В	lo	10	10	lo	10	10	LU	58	18.80	8.45	
		C	10	10	lo	10	10	10	10	59	21.15	937	
	V:21.4	- D	10	16	10	1.0	10	10	10	40	17.97	8.01	
	. ~ ~ ~	A	10	10	c1	10	10	10	10	41	18-46	8.05	
3	C: 1. 8 0 %	В	10	10	13	10	14	10	10	42	17.03	8.12	
l		С	10	16	10	10	14	10	10	43	18-66	7.98	
L	V: 43,2	D	10	10	(0	10	10	1A	10	44	1.9.35	9.44	
	2	* A	OI	10	(0	10	115	143	10	45	1910	8.37	
4	C:3,60090		(0)	10	(0	10	10	10	10	46	18.08	8.02	
	01 11	. С	10	10	(5	10	l ji	14	to	.705	19-38	8.23	
L	V: 86,4	·D	10	10	10	10	10	10	9	48	16.64	8.03	
	A 61.40 B	A	10	1.0	(a	10	10	10	10	404	14.93	736	
15	C: (60%	В	10	10	10	1.0	10	10	lo	20	17-41	2.0%	
	16 7 16 16 1	С	10	ID	-10	[0	10	10	10	71	12.55	2.21	
L	v: 2490	D	10	10	01	(0)	10	10	70	72	16.45	7.93	100-40-111-0-1
	Renewal/Cour	8	1120	1315	1150	1355	1125	1020	1215	Tare W	t: Date: 4(2/	Calib, Chk (10	0.00 mg ⁴): (a,4) Init: CO
L		Initials:	13	PB	l P	Co	CA	CB.	MB	1 or. W	i. Date. if 25	Canb. Clik (10	0.00 mg ⁴): 10.00 Init: RA

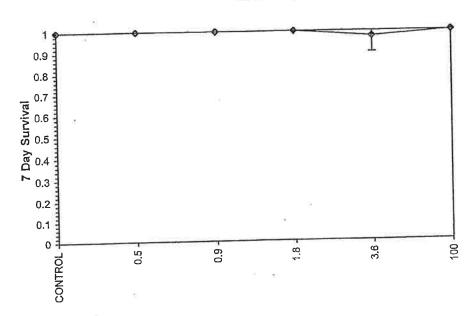
The of final count = test end time. True value + estimated uncertainty of calibration weight (NIST traceable annual certification) = (4.40+ A.45- mg

	9/15/2009 9/22/2009		Test ID: (OMEG090: CBI		rvival Test-7 Day Su Sample ID: Sample Type: Test Species:	OUTFALL 001 WW CV-Cyprinodon variegatus	
Comments:			3	1	~~~~~~ ~			
Conc-%	1		3	4 0000				
CONTROL	1.0000	1.0000		1.0000				
0.5	1.0000	1.0000	1.0000	1.0000				
0.9	1.0000	1.0000	1.0000	1.0000		*		
1.8		1.0000	1.0000	1.0000				
3.6		1.0000		0.9000				
100		1.0000		1.0000	10			

-91	- 6		Tra	ansform:	Arcsin Sc	uare Root		Rank	1-Tailed	
Conc-%	Mean	N-Mean	Mean	Min	Max	CV%	N	Sum	Critical	
CONTROL	1.0000	1.0000	1.4120	1.4120	1.4120	0.000	4			
0.5	1.0000	1.0000	1.4120	1.4120	1.4120	0.000	4	18.00	10.00	
0.9	1.0000	1.0000	1.4120	1,4120	1.4120	0.000	4	18.00	10.00	
1.8	1.0000	1.0000	1.4120	1.4120	1.4120	0.000	4	18.00	10.00	
	0.9750	0.9750	1.3713	1.2490	1.4120	5.942	4	16.00	10.00	
3.6 100	1.0000		1,4120	1.4120	1.4120	0.000	4	18.00	10.00	

					Statistic	Critical	Skew	Kurt
Auxiliary Tests	etribution (0 (- 0 01)		0.46508	0.884	-3.0206	13.9892	
Shapiro-Wilk's Test indicates non	-normal di) Homounus	p <= 0.01)	9	0.10000	15/5/50000		
Equality of variance cannot be co	NOEC	LOEC	ChV	TU				
Hypothesis Test (1-tail, 0.05)			Oliv	1				
Steel's Many-One Rank Test	100	/>100		,	**			

Dose-Response Plot

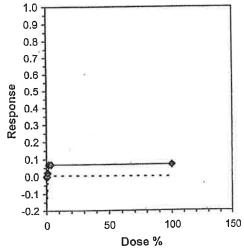


			Lar	val Fish Growth and Su	vival Test-7 Day Bio	
O (9/15/2009 9/22/2009		Lab ID:	OMEG0903CV CBI EPAM 94-EPA Marine	Sample ID: Sample Type: Test Species:	OUTFALL 001 WW CV-Cyprinodon variegatus
Comments:						
Conc-%	1	2	3	4		A section of the sect
CONTROL	1.0390 -	0.8860	1.0740	1.0810	5 EE30	
0.5	1.0190	1.1810	1.1330	1.2520		
0.9	1.0470	1.0150	1.1780	0.9960		
1.8	1.0410	0.8910	1.0680	0.9710		
3.6	1.0730	1.0060	1.1150	0.8610		
100	0.9570	1.0350	1.2340	0.8520		

				Transform: Untransformed				18	1-Tailed			Isotonic	
Conc-%	Mean	N-Меап	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD	Mean	N-Mean	
CONTROL	1.0200	1.0000	1.0200	0.8860	1.0810	8.941	4				1.0831	1.0000	
0.5	1.1463	1.1238	1.1463	1.0190	1.2520	8.542	4	-1.661	2.410	0.1832	1.0831	1.0000	
0.9	1.0590	1.0382	1.0590	0.9960	1,1780	7.750	4	-0.513	2.410	0.1832	1.0590	0.9777	
1.8	0.9928	0.9733	0.9928	0.8910	1.0680	7.978	4	0.358	= 2.410	0.1832	1.0087	0.9313	
3.6	1.0138		1.0138	0.8610	1,1150	10.978	4	0.082	2.410	0.1832	1.0087	0.9313	
100	1.0195	0.9995	1.0195	0.8520	1.2340	15.838	4	0.007	2.410	0.1832	1.0087	0.9313	

Auxiliary Tests					Statistic		Critical		Skew	Kurt
Shapiro-Wilk's Test indicates non		0.97698		0.884			-0.2074			
Bartlett's Test indicates equal var	iances (p =	0.84)			2.0883		15.0863			
Hypothesis Test (1-tail, 0.05)	NOEC	LOEC	ChV	TU	MSDu	MSDp	MSB	MSE	F-Prob	df
Dunnett's Test	100	>100		1	0.18324	0.17964	0.0123	0.01156	0.41252	5, 18

				Line	ar Interpolati	on (200 Re	samples	s)	
Point	9/	6	SD	95% CL(Exp)	Skew		100		
IC05	1.4	370						190	
IC10	>	100							
IC15	>	100					1.0		
IC20	>	100	1				0.9		
IC25	>	100	,/				0.8		
IC40	>	-100					0.7		
IC50	, ;	100				- 10	0.6	22	
						ġ.			



Larval Fish Growth and Survival Test-7 Day Biomass **OUTFALL 001**

Start Date: End Date:

9/15/2009 12:00

9/22/2009 12:15

Test ID: OMEG0903CV Lab ID: CBI

Protocol: EPAM 94-EPA Marine

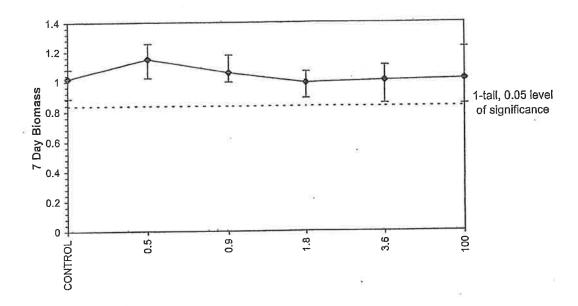
Sample ID:

Sample Type: Test Species:

ww CV-Cyprinodon variegatus

Sample Date: Comments:

Dose-Response Plot



	IN	ITIAL SAM	PI E CHAR	ACTERIZA	TION1 ·			
Sample Bottle ²	A-1	B-1	C-1	,		NOTES:		a a
Tot. Res. Chlorine (mg/l)	CQL.	. <q.l.< td=""><td>402</td><td></td><td></td><td></td><td></td><td>y</td></q.l.<>	402					y
Hardness (mg/l CaCO ₃)	2840	2980	2920	. \	**			
Alkalinity (mg/l CaCO ₃)	99	100	144				=	
NH ₃ -N (mg/l)	2.2	3,2	3,3				•	
Color/Appearance ³	CY	CY	CY					
Obvious Odor?	10	ПЬ	NO					
Date/Time	2/15/09/195	9/11/09/100	9/18/10/5					
Initials	PB	PB	bia	,		7 0 1	w-manier	
	IPLE PREF	ARATION	MEASURE	MENTS (10	0% concer			
Sample Bottle ²	A-1	A-2	B-1	01.	C-2	0.3	C-4	B-Z
Prep Temperature (°C)	26	26	25	25	24	25	26	25
Initial Salinity (g/kg)	14	16	16	15	16	150	14	16
Adjusted Salinity (g/kg)	20	20	20	20	20	19	19	20
DO (mg/l) After Warm/Sal	6.2	4.4	5,5	4.3	4,4	2.3	1.1	-3.4
Aeration Time (min)		_	-		_		4,5	3.0
Adjusted D.O.		-		_	_		5.2	le.2
Final pH (S.U.)	7.31	7.23	7.35	7.08	213	7.44	7.42	7.26
Tot. Res. Chlorine (mg/l)4	n.b.	N-D,	M.D.	Ni)	เกง.	N.D	N.D.	n.b.
Sample Filtered (60 um)?	No	Λb	No	No	NO	NO	V7P	W0
Date/Time	9/15/09/135	9/1409 1120	1/17/09/305	9/18/1135	9/19 1320	A124 1115		9/11/09 142
Initials	PS	RS	AS	Co	PB	en	CB	PB
*	D	ILUTION W	ATER CHA	RACTERIS	TICS			010
Vat Number/Letter	Δ	D	4	Ď	D	7	2	F"
Temperature (°C)	25	25	25	25	2,5	25	25	26
Salinity (g/kg)	70	20	21	21	26	20	20	20
D.O. (mg/l)	7-3	7.3	7.3	7-3	7.3	2.3	7.3	7.3
pH (S.U.)	7-74	783	295	7.99	7.83	7.99	7.86	7.71
Date/Time	9/15/09/08/15	9/1409 0830	Plinlog 0745	9/18/09 0315	9/19/09 1300	9/20 1030		9/1/09/130
Initials	RB	PB	PB	PB	PB	Cig	LA LA	PB

Q.L. = Quantification Limit, N.D. = Not Determined/Measured, NA = Not Applicable ²Ninth character of Laboratory Sample i.D. (on chain of custody form) <u>and</u> bottle number in collection series (e.g. bottle "A-2" is sample bottle number 2 from "A" collection). Together with project ID below constitutes entire sample bottle ID. 3 C-Clear, O-Opaque, T-Turbid, S-Solids (SI-Slight, M-Moderate, H-Heavy), Y-Yellow, B-Brown, BI-Black, G-Green ⁴Total residual chlorine measured after sample prep only if present in initial sample characterization



PH: 804-694-8285, FAX: 804-695-1129 www.coastalbio.com

SAMPLE INFORMATION/CHAIN-OF-CUSTODY (FORM ETF2011E Rev. 4/15/09)

(Lab Use Only) A A A A A Y Y N N A Spi
FACILITY INFORMATION CLIENT/FACILITY NAME OMEGA Protein & PHONE # Ted Schultz 453-42/1 NPDES PERMIT NO VACCO 3867. OUTFALL # OR LOCATION OR LOCATION
SAMPLE DECHLORINATED? IF CHLORINE PRESENT UPON ARRIVAL AT LAB; DOES PERMIT SPECIFY DECHLORINATION OF SAMPLES?
TESTS SPECIES OR EPA METH# REQUESTED: SPECIES OR CHRONIC CHR
EPA METH#
OTHER TESTS: A SPECIFIC DILUTION SERIES MAY BE REQUIRED IN THE PERMIT. A DEFAULT SERIES OF 100, 50, 25, 12.5 AND 6.3%, OR CONCENTRATIONS USED IN PRIOR TESTING, WILL BE USED UNLESS INDICATED OTHERWISE. IF IN DOUBT PLEASE ATTACH A COPY OF APPLICABLE PERMIT PAGES.
GRAB SAMPLE INFORMATION SAMPLE DATE SAMPLE DATE SAMPLE VOLUME
COMPOSITE SAMPLE INFORMATION SAMPLE START DATE & TIME 9/15/09 07:00 DATE & TIME 9/15/09 07:00 TEMP. (°C) 4.1°C TIME OR FLOW NUMBER SUBSAMPLES 96 VOL (ml) SUBSAMPLES 1 INCREMENT 15 min V PROPORTIONAL SUBSAMPLES SET VOLUME SUBSAMPLE SET VOLUME FLOW 175, 500 ga / hr VOLUME INFORMATION SUBSAMPLE FLOW 175, 500 ga / hr VOLUME SUBSAMPLE SET VOLUME FLOW 175, 500 ga / hr VOLUME INFORMATION ON SEPARATE SHEET FOR VARIABLE VOLUME SUBSAMPLES BASED ON FLOW (COMPOSITING 'BY HAND') ATTACH SAMPLE AND FLOW INFORMATION ON SEPARATE SHEET FIELD MEASUREMENTS DISCHARGE DISCHARGE SAMPLE SAMPLE DATE/TIME (e.g. 02/23/00 1835) TEMP (°C) PH (S.U.) TEMP (°C) TRC (mg/l) (e.g. 02/23/00 1835) MEASUREMENTS MUST BE TAKEN WITHIN 15 MINUTES OF SAMPLE OR LAST SUBSAMPLE COLLECTION. COMMENTS:
(PRINTED NAME/AFFILIATION SAMPLER/ANALYST) (PRINTED NAME/AFFILIATION SAMPLER/ANALYST) (DATE) REGEIVED BY: DATE TIME: REGEIVED BY:
JRHall 9/15/04 10:15 & Blasco
SHIPPING METHOD: UPS FEDEX HAND DELIVERYOTHER
CONDITION ON ARRIVAL: ACCEPTABLE OTHER
SAMPLE ARRIVAL TEMP: (°C) 3 ARRIVED ON ICE? YES NO (>0.6° C) and shipped. Sample hold tir
NOTE: It is the responsibility of the sampler to insure that samples are properly collected, preserved (>0-6° C) and shipped. Sample hold tire NOTE: It is the responsibility of the sampler to insure that samples are properly collected, preserved (>0-6° C) and shipped. Sample hold tire NOTE: It is the responsibility of the sampler to insure that samples are properly collected, preserved (>0-6° C) and shipped. Sample hold tire NOTE: It is the responsibility of the sampler to insure that samples are properly collected, preserved (>0-6° C) and shipped. Sample hold tire NOTE: It is the responsibility of the sampler to insure that samples are properly collected, preserved (>0-6° C) and shipped. Sample hold tire NOTE: It is the responsibility of the sampler to insure that samples are properly collected, preserved (>0-6° C) and shipped. Sample hold tire NOTE: It is the responsibility of the sampler to insure that samples are properly collected, preserved (>0-6° C) and shipped. Sample hold tire not sample hold tire not sample hold tire not sample hold to sample hold tire not sample hold tire n



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SAMPLE INFORMATION/CHAIN-OF-CUSTODY (FORM ETF2011E Rev. 4/15/09)

Lab Sample ID D M. E. C.	0 9 0 3 8
(Lab use Of liv)	Y Y N N Spl
Project	
FACILITY INFORMATION	
COLUMN TO COLUMN TO	& PHONE # Ted Schultz 453-4211
NAME OMEGA I rOTEIN	
NPDES PERMIT NO VA 000 3P6 7	OR LOCATION OUT
SAMPLE A SAMPLE	IF CHLORINE PRESENT UPON ARRIVAL AT LAB, DOES PERMIT SPECIFY DECHLORINATION OF SAMPLES?
CHLORINATED? // DECHLORINATED? // SPECIES OR	
TESTS EPA METH#	m.bahis ACUTE CHRONICLE
REQUESTED: SPECIES OR EPA METH #	C.Va. icha Lo Acute - CHRONIG-
OTHER TESTS:	
8	€
8	AND CONCENTRATIONS USED IN
A SPECIFIC DILUTION SERIES MAY BE REQUIRED IN THE PERMIT. PRIOR TESTING, WILL BE USED UNLESS INDICATED OTHERWISE.	A DEFAULT SERIES OF 100, 50, 25, 12.5 AND 6.3%, OR CONCENTRATIONS USED IN IF IN DOUBT PLEASE ATTACH A COPY OF APPLICABLE PERMIT PAGES.
	380
GRAB SAMPLE INFORMATION SAMPLE DATE SAMPLE TIME	SAMPLE VOLUME
SAMPLE DATE	
TUTOPILATION	
COMPOSITE SAMPLE INFORMATION	END 9/17/09 07:15 AUTOSAMPLER 4:0
DATE & TIME 9/16/09 07:15 DATE &	TIME 9////0/ O / FIME TIME
TIME OR FLOW NUMBER 96	VOL (ml) SUBSAMPLES 200 TIME INCREMENT / 6 m/m
PROPORTIONAL SUBSAMPLES / COMPOSITE SET VOLUME	SET VOLUME / /_/_TOTAL
MISORMATION	FLOW 175, 500gal/dayvolume_
FOR VARIABLE VOLUME SUBSAMPLES BASED ON FLOW (COMPO	DSITING "BY HAND") ATTACH SAMPLE AND FLOW INFORMATION ON SEPARATE SHEET
FIELD MEASUREMENTS	INITIALS
DISCHARGE DISCHARGE SAMPLE	SAMPLE DATE/TIME INITIALS TRC (mg/l) (e/g. 02/23/00 1835)
TEIVIF (0) Prices	9/17/09 08:00 183
33.4 7.06 4.0	
MEASUREMENTS MUST BE TAKEN WITHIN 15 MINUTES OF SAMP	LE OR LAST SUBSAMPLE COLLECTION.
COMMENTS:	1-11
. 7	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Ted Schultz Technical	Supervisor Vertily 9/17/09
(PRINTED NAME/AFFILIATION SAMPLER/ANA	LYST) (SIGNATURE) (DATE)
	TO THE PROPERTY OF THE PROPERT
RELINQUISHED BY DA	TE TIME RECEIVED BY
9/12	109 10:45 11/11
JA Hall	100
14/17	109
TEDEV	HAND DELIVERY OTHER
· Offin filt of in-	
CONDITION ON AKKIVAL. MOOL!	OTHER
ARRIVAL TEMPS (°C) 2 ARRIV	VED ON ICE? YES NO
OMBIT LL AND STALL I MINISTER STATE OF THE S	
NOTE: It is the responsibility of the sampler to insure that	t samples are properly collected, preserved (>0-6° C) and shipped. Sample hold time esservation, shipping or receipt of samples after 3 p.m. or on weekends and holidays.



6400 Enterprise Court, Gloucestei, VA 23001 PH: 804-694-8285, FAX: 804-695-1129 www.coastalbio.com

SAMPLE INFORMATION/CHAIN-OF-CUSTODY (FORM ETF2011E Rev. 4/15/09)

Lab Sample-ID (Lab Use Only)	6 G D	9 0 3 Y N N		* 4
	Project ID	E	Spl	
FACILITY INFORMATION		CONTACT 1	-1011	1153-111
011111	Tein	& PHONE #	ed Jchv1/2	453-4211
TEIGHT NO	8.67	x	OR LOCATION (007
0.120.1112	RINATED? No	PERMIT SPECIFY	SENT UPON ARRIVAL AT DECHLORINATION OF SA	MPLES?
SPECIES OR TESTS EPA METH#		m.babia	ACUTE 4	CHRONIC
REQUESTED: SPECIES OR EPA METH #		C. Varilya	VY ACUTE T	CHRONIC D
OTHER TESTS:		- 3		
A SPECIFIC DILUTION SERIES MAY BE REQUIRE PRIOR TESTING, WILL BE USED UNLESS INDICAT	D IN THE PERMIT. A DEF	AULT SERIES OF 100, 50	, 25, 12.5 AND 6.3%, OR CON A COPY OF APPLICABLE PE	CENTRATIONS USED IN RMIT PAGES.
er e	24			
GRAB SAMPLE INFORMATION SAMPLE DATE	SAMPLE TIME		SAMPLE VOLUME	
4	L.			i i consultante de la consultante del consultante de la consultante del consultante de la consultante
COMPOSITE SAMPLE INFORMATION	ON SAMPLE END	n lake as	AUTOSAMI	PLER // O
DATE & TIME 9/17/09 07:1	5 DATE & TIME	17	7/5 TEMP. (°C	
TIME OR FLOW NUMBER PROPORTIONAL SUBSAMPLES_	96_ s	0007 11111 0000	INCREMEN	
COMPOSITE SET VOLUME INFORMATION SUBSAMPLE		FLOW 175,50	o/day vo	TAL LUME
FOR VARIABLE VOLUME SUBSAMPLES BASED O	N FLOW (COMPOSITING	BY HAND") ATTACH SA	MPLE AND FLOW INFORMAT	ION ON SEPARATE SHEET
FIELD MEASUREMENTS	04415/5	SAMPLE	DATE/TIME	INITIALS
DISCHARGE DISCHARGE TEMP (°C) pH (S.U.)		RC (mg/l) /	.g. 02/23/00 1835)	JAQ.
33,1 7.2	3.8	9/10	7730	/W >
MEASUREMENTS MUST BE TAKEN WITHIN 15 MI	NUTES OF SAMPLE OR	LAST SUBSAMPLE COLL	ECTION.	
COMMENTS:				
		E 8		9
(PRINTED NAME/AFFILIATION SA	MPLER/ANALYST)	(SIGNATURE)	(DATE)
RELINQUISHED BY	DATE	TIME	RECEIVE	DIBY
OND-1/2	P118109	10:10.6	DevelyHonali	derau
JA POLL	7.2		01	
SHIPPING METHOD: UPS F	EDEX HAN	D DELIVERY X	OTHER	
CONDITION ON ARRIVAL: ACCEP	TABLE X OTHE	R		
CAMPI S ADDIVAL TEMP: (OC)	ARRIVED	ON ICE? YES		
NOTE: It is the responsibility of the samplis 36 h. Additional costs may be incurred by				and shipped. Sample hold tin or on weekends and holidays
is 36 h. Additional costs may be mourred i	- Janes - American - A			

Client: Omega Protein
Project ID: OMEG0904
Client Sample ID: Outfall 002

Permit No: VA0003867 Sample Period: 9/23/09



Report of Analysis: Whole Effluent Toxicity (WET)

Submitted To:

Mr. Ted Schultz

Regulatory Compliance Officer
Omega Protein
P.O. Box 175
Reedville, VA 22539

Prepared By:
Coastal Bioanalysts, Inc.
6400 Enterprise Court
Gloucester, VA 23061
(804) 694-8285
www.coastalbio.com
Contact: Peter F. De Lisle, Technical Director

Acute Test Results								
Species-Test Method	48-h LC50	95% C.L.	T.U.Ac	NOAEC				
M. bahia EPA 2007.0	>100	N/A	<1.00	N/A				

Note: Details regarding test conduct and data analysis provided in attached bench sheets and printouts as applicable. Although the name of *Mysidopsis bahia* has officially been changed to *Americamysis bahia*, the former name is referenced because of its use in the EPA method manuals and most NPDES permits.

Acute Test Biological Sum			Sample	Concentra	tion (%)		
Species-Method	Endpoint	Control	6.25	12.5	25.0	50.0	100
M. bahia EPA 2007.0	Survival (%):	100	100	100	100	100	55

Test Information Species-Method	Start Date/Time End Date/Time	Organism Source	Hatch/Harvest Date/Time	Acclimation Temp.	Acclimation Water	Test Aerated?
M. bahia	9/23/09 1520	CBI	9/17/09 1100		HWM ASW	
EPA 2007.0	9/25/09 1530	Stock	9/18/09 0800	25° C	20 g/kg sal.	No

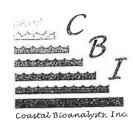
Sample/Dilution Water Data	Acute Test		
Water Quality Parameter (Units)	Sample	Dilution Water	
Arrival Temperature (°C)	4	N/A	
Use Temperature (°C)	26	26	
Arrival Salinity (g/kg)	3	N/A	
Use Salinity (g/kg)	20	20	
pH (S.U.)	7.07	7.70	
Dissolved Oxygen (mg/l)	7.0	7.3	
Total Hardness (mg/l as CaCO ₃)	344	N/A	
Alkalinity (mg/l as CaCO ₃)	323	N/A	
Total Residual Chlorine (mg/l)	<q.l.< td=""><td>N/A</td></q.l.<>	N/A	
Ammonia (mg/l NH ₃ -N)	18.2	N/A	

Dilution water = Hawaiian Marine Mix ASW made with deionized water

Sample Aging/Use/Pretreatment									
CBI Sample I.D.	Collection Date/Time	Date(s)/Time(s) 1st Used in Tests	Date(s)/Time(s) Used in Renewals	Sample Adjustments					
OMEG0904-A	9/23/09 0800	9/23/09 1520	N/A	Salt added					

Client: Omega Protein Project ID: OMEG0904 Client Sample ID: Outfall 002 Permit No: VA0003867

Sample Period: 9/23/09



Acute Test W	ater Qua	lity (Me	an/Std. I	Dev.)	64247	A. S. S.			
Test:		M. bahia 2007.0							
% Conc:	Cont.	6.25	12.5	25.0	50.0	100			
Temp.	26	26	26	26	26	26			
(°C)	0.5	0.5	0.5	0.5	0.5	0.5			
D.O.	6.2	6.1	6.0	5.8	5.6	5.4			
(mg/l)	1.0	1.0	1.0	1.2	1.3	1.6			
рH	7.59	7.58	7.55	7.52	7.61	7.74			
(S.U.)	0.07	0.07	0.08	0.16	0.38	0.60			

Acute Test QA/QC	Reference To	xicant: KCl Unit	s: mg/l Test O	rganism Source: CBI	Stock Culture
Species-Method (Ref. Test Date)	Data Source	% Control Survival	48-h LC50	95% C.L./A.L. for LC50	RTT in Control?
M. bahia 2007.0	RTT	100	526	481-576	Yes
(9/8/09-9/10/09)	CC	100	610	504-716	=

Note: RTT = Reference Toxicant Test, CC = Control Chart

The results of analysis contained within this report relate only to the sample as received in the laboratory. This report shall not be reproduced except in full without written approval from the laboratory.

APPROVED:

Peter F. De Lisle, Ph.D.

Technical Director

Date

GLOSSARY OF TERMS AND ABBREVIATIONS

A.L. (Acceptance Limits): The results of a given reference toxicant test are compared to the control chart mean value \pm 2 standard deviations. These limits approximate the 95% probability limits for the "true" reference toxicant value.

C.L. (Confidence Limits): These are the probability limits, based on the data set and statistical model employed, that the "true value" lies within the limits specified. Typically limits are based on 95% or 99% probabilities.

Control chart: A cumulative summary chart of results from QC tests with reference toxicants. The results of a given reference toxicant test are compared to the control chart mean value and 95% Acceptance Limits (A.L.) (mean ± 2 standard deviations).

LC50: The concentration of sample or chemical, calculated from the data set using statistical models, causing a 50% reduction in test organism survival. The lower the LC50, the more toxic the chemical or sample. Units are same as test concentration units. Note: The LC50 value must always be associated with the duration of exposure. Thus 48-h LC50, 96-h LC50, etc. are calculated.

N/A: Not applicable. N/D: Not determined or measured.

NOAEC: No-observable-acute-effect-concentration. The highest concentration of sample or chemical in an acute test dilution series in which the test organisms exhibit no statistically significant reduction in the test end point (e.g. survival) compared to control organisms. Units are same as test concentration units.

Q.L.: Quantitation Limit. Level, concentration, or quantity of a target variable (analyte) that can be reported at a specified degree of confidence.

T.U.: Toxic units. Expresses the relative toxicity of an effluent in such a manner that the larger the toxic unit value the more toxic the effluent. T.U._{Ac} = 100/LC50. T.U._{Ctr} = 100/NOEC. A dimensionless unit.

Page 2 of 2 Report Pages
Total No. Printouts/Bench Sheets Attached: 3

EPA Labortatory ID: VA01116

MYSIDOPSIS BAHIA STATIC ACUTE WET TEST 48-H TEST (AMB) FORM ETF1011F

	% Effluent	I.D.	Day 0 Live	Day 1 Live	Day 2 Live	Final % Survival
	Lab	C-A	10	{0	10	
	Control	C-B	(0)	10	10	100
		1-A	10	ID	(7)	
	6.25	1-B	10	10	10	100
		2-A	Į0	1.10	13	
	12.5'	2-B	10	10	10	100
	24.0	3-A	10	10	10	
-	25.0	3-B	10	(0	10	100
		4-A	10	(0)	10	
ı	50.0	4-B	10	1.6	10	100
ı		5-A	10	10	S-	55
1	VAV	5-B	10	10	له	52
	Initials: Count Time:		PB	PB	UB	
			1500	0915	1530	*Test End Time

Parameter	Treatment I.D.	Day 0	Day 1	Day 2
	С	Zfo	26	25
Temp.	1	26	24	25
(°C)	2	26	20	25
	3	24	26	25
	4	26	26	25
	5	24	26	24
	С	7.65	7-40	2.51
pН	1	7.58	7.45	2.51
(S.U.)	2	7.50	7.65	7.51
	3	7.35	7.67	2.55
	4	7.18	7.74	7.90
	5	7.07	7,95	8.21
	С	7-3	5.5	5.7
D.O.	1	7.3	5.4	5.4
(mg/l)	2	7.2	5-3	5.5
	3	7.2	5.2	5.0
	4	7-1	5.(4.6
	5	7.1	5.1	4,4
	С	20	强烈动物	DA
Salinity	1	表数的		
(g/kg)	2	30.00mm (1.00mm)		
	3		2000年	
	4	21000	7000	強度可能
	5	20		θU
Replicate Me	easured:	A	B	B
Initials:		A3	PB.	CB
TRC (mg	g/I) in highest	conc. at end-o		MA

COASTAL BIOANALYSTS, INC EFFECTIVE DATE: 2/1/09

Species: Mysidopsis (Americamysis) bahia
Source: CBI stock cultures
Other:
Harvest: Date/time start: 9/17/29/1/00
Date /time end: 9 18 09 0800
Acclimation: Water: ASW 20 g/kg salinity
Other
Temperature (°C):
Feeding: Prior to test: Artemia ad libitum During test: Artemia nauplii ca. 100 /mysid/day
Illumination: 16L:8D 10-20 uE/m²/s
Test chamber size:400 ml250 ml
Solution volume:200 mlml
Number of replicates/treatment: 2
Initial number of mysids/replicate: 10
Set up: Date (Day 0): 9/23/09
Time water added: 15/6
Time mysids added: 1620
Set up by (initials):
NOTES:
10.120.
¥
AC VI DES
A SEC.

EFFLUENT SAMPLE & DILUTION WATER CHARACTERISTICS SALTWATER TESTS FORM ETF2032D

	INITIA	L SAMPLE CHAR	ACTERIZA	ATION1		
Sample Bottle ²	A-1		i,		NOTES:	3
Tot. Res. Chlorine (mg/l)	ewl.	rae:]		
Hardness (mg/l CaCO ₃)	34.4			100		3900
Alkalinity (mg/l CaCO ₃)	393					
NH ₃ -N (mg/l)	18,2					
Color/Appearance ³	C.					
Obvious Odor?	NO					
Date/Time	9123 1050					
Initials	CB			ŀ		
SAI	MPLE PREPARA	ATION MEASURE	MENTS (10	00% conce	entration)	
Sample Bottle ²	A-1					
Prep Temperature (°C)	24					
Initial Salinity (g/kg)	3					
Adjusted Salinity (g/kg)	20	1		(8)		
DO (mg/l) After Warm/Sal	7.0					
Aeration Time (min)						
Adjusted D.O.						
Final pH (S.U.)	7-07					
Tot. Res. Chlorine (mg/l) ⁴	4.0		c	N.		
Sample Filtered (60 um)?	20					
Date/Time	9/23 1500					
Initials	PB	**				
		ION WATER CHA	RACTERIS	STICS		
Vat Number/Letter	В					
Temperature (°C)	26		5	7		
Salinity (g/kg)	20		1			
D.O. (mg/l)	7.3		11 66			
pH (S.U.)	7.70					
Date/Time	7/2.3 1505					
Initials	P.B					

Q.L. = Quantification Limit, N.D. = Not Determined/Measured, NA = Not Applicable

Peer Rev by bol 6 Date 40409 PROJECT I.D. DM E CO 9 (First 8 characters of Laboratory Sample ID)

²Ninth character of Laboratory Sample I.D. (on chain of custody form) and bottle number in collection series (e.g. bottle "A-2" is sample bottle number 2 from "A" collection). Together with project ID below constitutes entire sample bottle ID.

3C-Clear, O-Opaque, T-Turbid, S-Solids (SI-Slight, M-Moderate, H-Heavy), Y-Yellow, B-Brown, BI-Black, G-Green ⁴Total residual chlorine measured after sample prep only if present in initial sample characterization



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SAMPLE INFORMATION/CHAIN-OF-CUSTODY (FORM ETF2011D Rev. 10/10/07)

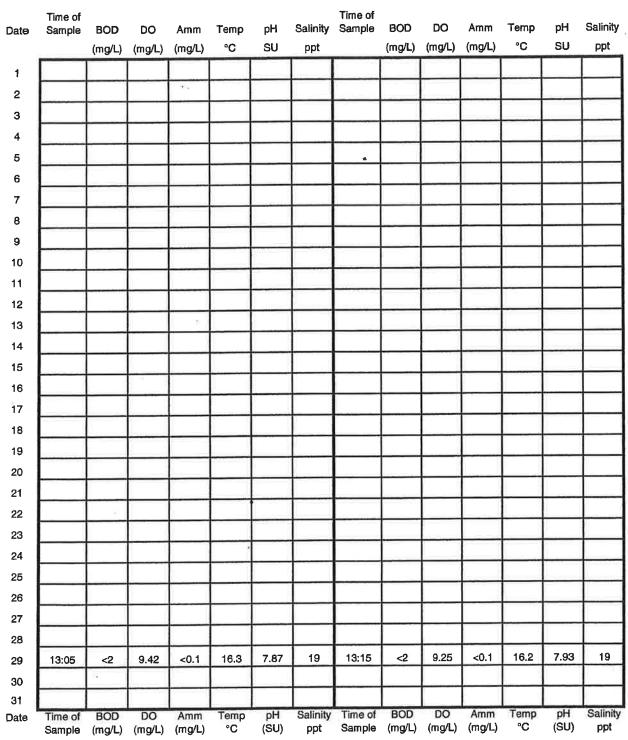
(Lab Use Only)		E G	01	9 0	I N						
FACILITY INFOR	MATION										
CLIENT/FACILITY	D	+		CONTACT & PHONE	# 7	Ed Schultz					
NAME () MC	ga Pro	tein_		& FITONE		OUTFALL #	002				
PERMIT NO	VADOO	3867		IE CUI OBI	NE DD	OR LOCATION ESENT UPON ARRIVAL AT	A CONTRACTOR OF THE PARTY OF TH				
SAMPLE CHLORINATED?	/ *	ORINATED? 1	'o	PERMIT SE	ECIFY	DECHLORINATION OF SA	MPLES?				
	SPECIES OR EPA METH#	M	. <i>l</i> :	ahia	۷	ACUTE 🖸	CHRONIC 🗆				
	SPECIES OR EPA METH#	\subset	1	jarie	9	ACUTÉ 🗆	CHRONIC 🗆				
OTHER TESTS:	.5	ee at	tac	hed.	,						
	\circ										
	CEDIES MAY BE BEOLI	IBED IN THE PERMIT	A DEFA	AULT SERIES	OF 100	50, 25, 12.5 AND 6.3%, OR CO	NCENTRATIONS USED IN				
PRIOR TESTING, WILL	BE USED UNLESS INDI	CATED OTHERWISE.	IF IN DO	OUBT PLEAS	EATTA	CH A COPY OF APPLICABLE P	ERMIT PAGES.				
GRAB SAMPLE INFORMATION SAMPLE TIME SAMPLE VOLUME											
SAMPLE DATE		SAMPLE TIME				SAMPLE VOLUME					
L											
COMPOSITE SA	MPLE INFORMA	TION	-	COMPOSI			3 P.C.				
DATE & TIME	1/22/09 1	00:00	VO	DATE & TI	ME	9/23/09 (TIME	08:00				
TIME OR FLOW PROPORTIONAL	NUMBER SUBSAMPLE	s		BSAMPLES.		INCREMENT_					
COMPOSITE	SET VOLUME		ii.	SET VOLU	ME	sample/1000gal VO	TAL 151,0000 0 - 1				
FOR VARIABLE VOLU	SUBSAMPLE IME SUBSAMPLES BASI	ED ON FLOW (COMPO	SITING	"BY HAND") A	TTACH	SAMPLE AND FLOW INFORMA	TION ON SEPARATE SHEET				
FIELD MEASUF		17 - 17 - 17 - 17 - 17 - 17 - 17 - 17 -									
DISCHARGE . TEMP (°C)	DISCHARGE pH (S.U.)	SAMPLE TEMP (°C)		AMPLE C (mg/l)		DATE/TIME (e.g. 02/23/00 1835)	INITIALS				
751	6.68	4			9/	23/09 8:10	VHS				
MEASUREMENTS MU	JST BE TAKEN WITHIN	15 MINUTES OF SAME	LE OR I	AST SUBSAM	IPLE CO	DLLECTION.					
COMMENTS:						1 2	a (/ f/				
OGISIII Z.C.C.	- 1	11 4	Ŷ	. –		Theodin	· / John for				
Theodo	re John	112/lec		ca/ Soj-	ervi	701 A	7/23/01				
(PRINTED NA	ME/AFFILIATION	SAMPLER/ANA	LYST)		(SIGNATURE)	(DATE)				
REL	INQUISHED BY	DA	ŢΕ	TIME		RECEIVE	DBY				
0.0	1 00	7/12/	00	10:4	120	D. Dais					
JA.	Day	V/a.y	07_	10.1	0	33.000					
						_					
	THOD: UPS				RY_ن	OTHER					
CONDITION OF	N ARRIVAL: ACC	CEPTABLE	OTHE	R							
SAMPLE ARRI	VAL TEMP: (°C)	ARR	IVED	ON ICE?	YES_	NO					
							and shipped. Sample hold tim . or on weekends and holidays.				
is 36 h. Additiona	costs may be incur	ed by improper pro	servat	on, shipping	or rec	colpt of samples after 3 p.m	or on weekends and holidays.				

Omega Protein, Inc. VPDES Permit # VA0003867 Part I.B.3

Chesapeake Bay Water Quality Monitoring Data

Predischarge

After Discharge



Name of Vessel: Landcaster

Name of Sampler: Ted Schultz

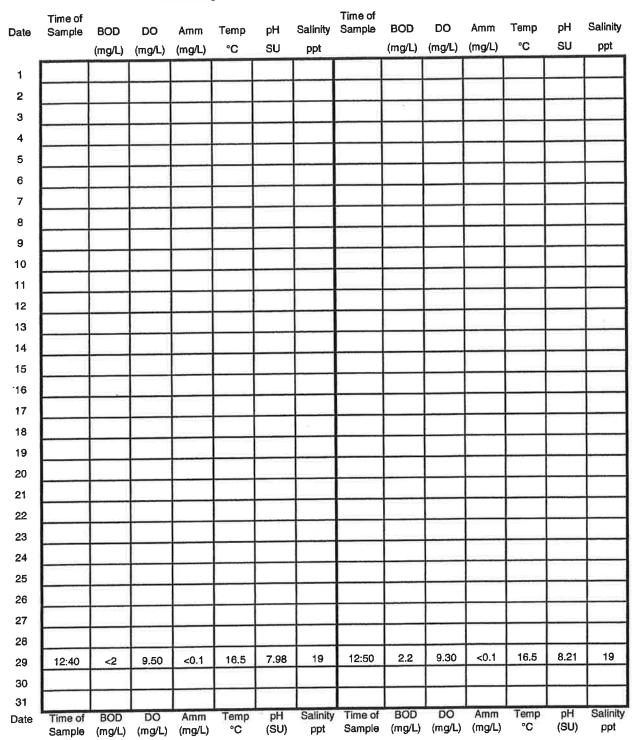
AttachmentHandler.ashx

Omega Protein, Inc. VPDES Permit # VA0003867 Part I.B.3

Chesapeake Bay Water Quality Monitoring Data

Predischarge

After Discharge



Name of Vessel: Tideland

Name of Sampler: Ted Schultz

AttachmentHandler.ashx

Chesapeake Bay Water Quality Monitoring Data

Predischarge After Discharge Time of Time of DO Date Sample BOD Amm Temp pΗ Salinity Sample BOD DO Amm Temp pН Salinity °C (mg/L) (mg/L) (mg/L) SU ppt °C (mg/L) (mg/L) (mg/L) SU ppt 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 12:40 9.50 <0.1 16.5 7.98 12:50 2.2 29 <2 19 9.30 < 0.1 16.5 8.21 19 30

Name of Vessel: Tideland

Time of

31

Date

Name of Sampler: Ted Schultz

BOD

Sample (mg/L) (mg/L)

DO

Amm

(mg/L)

AttachmentHandler.ashx

Salinity

ppt

Time of

Sample

BOD

DO

(mg/L) (mg/L)

Amm

(mg/L)

Temp

°C

pH

(SU)

Salinity

ppt

рН

(SU)

Temp

°C

Chesapeake Bay Water Quality Monitoring Data

Predischarge

After Discharge

Date	Time of Sample	BOD	, DO	Amm	Temp	pН	Salinity	Time of Sample	BOD	DO	Amm	Temp	pН	Salinity
		(mg/L)	(mg/L)	(mg/L)	°C	SU	ppt		(mg/L)	(mg/L)	(mg/L)	°C	SU	ppt
1														
2														
3														
4														
5														
6														
7														
8														
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10														
11														
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22								1015						
23										l x				
24														
25														
26													8	
27														
28														
29	13:05	<2	9.42	<0.1	16.3	7.87	19	13:15	<2	9.25	<0.1	16.2	7.93	19
30														
31														
Date	Time of Sample	BOD (mg/L)	DO (mg/L)	Amm (mg/L)	Temp °C	pH (SU)	Salinity ppt	Time of Sample	BOD (mg/L)	DO (mg/L)	Amm (mg/L)	°C	pH (SU)	Salinity ppt

Name of Vessel: Landcaster

Name of Sampler: Ted Schultz

AttachmentHandler.ashx

Facility Name: Omega Protein

VA0003867

Address: Reedville, VA.

VPDES Permit No.:

1	Report Period: From 10, 1,09 To 10, 4109
	Paint Area COMPLIANCE / NONCOMPLIANCE * (check as appropriate)
	*Comments on Noncompliance
	Theodore Schutte / Technical Supervisor Name of Principal Exec. Officer or Authorized Agent / Title
	I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See 18 U.S.C. paragraph 1001 and 33 U.S.C. paragraph 1319. (Penalties under these statutes may include fines up

to \$10,000 and or maximum imprisonment of between 6 months and 5 years).

Signature of Principal Officer or Authorized Agent / Date

Facility Name: Omega Protein Address: Reedville, VA.
VPDES Permit No.: VA0003867
Report Period: From 10/5/09 To 10/11/09
Paint Area COMPLIANCE / NONCOMPLIANCE * (check as appropriate)
*Comments on Noncompliance
Theodore Schultz / Technical Supervisor Name of Principal Exec. Officer or Authorized Agent / Title
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See 18 U.S.C. paragraph 1001 and 33 U.S.C. paragraph 1319. (Penalties under these statutes may include fines up to \$10,000 and or maximum imprisonment of between 6 months and 5 years).
Signature of Principal Officer or Authorized Agent / Date

Facility Name: Omega Protein Address: Reedville, VA.

VPDES Permit No.: VA0003867

Report Period: From 19 14 07 To 101	<u>17</u> 0 1
Paint Area CO	OMPLIANCE / NONCOMPLIANCE * (check as appropriate)
the state of the s	
3	
*Comments on Noncompliance	
Theodore A Schultz /T Name of Principal Exec. Officer or Autho	rized Agent / Title
l certify under penalty of law that this doc supervision in accordance with a system evaluate the information submitted. Base or those persons directly responsible for g my knowledge and belief true, accurate a submitting false information, including the U.S.C. paragraph 1001 and 33 U.S.C. paragraph 1001 and 33 U.S.C. paragraph 1001 and 33 U.S.C.	designed to assure that qualified personnel properly gather and ed on my inquiry of the person or persons who manage the system gathering the information, the information submitted is to the best of and complete. I am aware that there are significant penalties for a possibility of fine and imprisonment for knowing violations. See 18 ragraph 1319. (Penalties under these statutes may include fines up ent of between 6 months and 5 years).

}	Facility Name: Omega Protein Address: Reedville, VA.
,	VPDES Permit No.: VA0003867
	Report Period: From 10/19/09 To 10/257 c' 9
	Paint Area COMPLIANCE / NONCOMPLIANCE * (check as appropriate)
	*Comments on Noncompliance
	Theodore Schultz Technical Supervisor Name of Principal Exec. Officer or Authorized Agent / Title
	I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See 18 U.S.C. paragraph 1001 and 33 U.S.C. paragraph 1319. (Penalties under these statutes may include fines up to \$10,000 and or maximum imprisonment of between 6 months and 5 years).
	Signature of Principal Officer or Authorized Agent / Date

Facility Name: Omega Protein Address: Reedville, VA.	38
VPDES Permit No.: VA0003867 Report Period: From <u>10 126/09</u> To <u>10/3/1</u> 0%	
Paint Area COMPLIANCE / NONCOMPLIANCE * (check as appropriate)	
	8
	s
*Comments on Noncompliance Theodore Schultz / Technical Segrerusor Name of Principal Exec. Officer or Authorized Agent / Title	
I certify under penalty of law that this document and all attachments were prepared und supervision in accordance with a system designed to assure that qualified personnel prevaluate the information submitted. Based on my inquiry of the person or persons who me or those persons directly responsible for gathering the information, the information submitted my knowledge and belief true, accurate and complete. I am aware that there are significant submitting false information, including the possibility of fine and imprisonment for knowing U.S.C. paragraph 1001 and 33 U.S.C. paragraph 1319. (Penalties under these statutes me to \$10,000 and or maximum imprisonment of between 6 months and 5 years). Signature of Principal Officer or Authorized Agent / Date	nanage the system tted is to the best of ficant penalties for violations. See 18



Theodore Schultz Regulatory Compliance

Patrick L. Bishop
Department of Environmental Quality
Piedmont Regional Office
4949-A Cox Road
Glen Allen, VA 23060-6296

RECEIVED OCT 0 52009 PRO

October 2, 2009

Re: VA0003867 Part I.C.1.a Biological Monitoring (Outfall 001)

Dear Patrick;

Please find enclosed two copies (2) of test report for Outfall 001 for 2nd Quarter WET testing.

Should any additional information be needed, please contact me via email or phone.

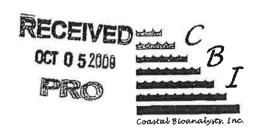
Sincerely,

Ted Schultz

Technical Supervisor

tschultz@omegaproteininc.com

Attachments



Report of Analysis: Whole Effluent Toxicity (WET)

Submitted To:
Mr. Ted Schultz
Coastal Bioanalysts, Inc.
Regulatory Compliance Officer
Omega Protein
P.O. Box 175
Reedville, VA 22539
Prepared By:
Coastal Bioanalysts, Inc.
6400 Enterprise Court
Gloucester, VA 23071
(804) 694-8285
www.coastalbio.com
Contact: Peter F. De Lisle, Technical Director

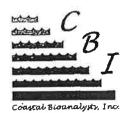
Acute Test Results										
Species-Test Method	48-h LC50	95% C.L.	T.U.Ac	NOAEC						
M. bahia EPA 2007.0	>100	N/A	<1.00	N/A						
C. variegatus EPA 2004.0	>100	N/A	<1.00	N/A						

Species- Test Method	Endpoint	NOEC	LOEC	ChrV	PMSD	T.U.c	IC25	48-h LC50	LC50 95% C.L.	T.U.A.
M. bahia	Survival	100	>100	>100	N/A	1.00	N/A	>100	N/A	<1.00
EPA 1007.0	Biomass	100	>100	>100	2 3	1.00	>100	N/A	N/A	N/A
	Fecundity	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
C. variegatus	Survival	100	>100	>100	N/A	1.00	N/A	>100	N/A	<1.00
EPA 1004.0	Biomass	100	>100	>100	18	1.00	>100	N/A	N/A	N/A

Note: Details regarding test conduct and data analysis provided in attached bench sheets and printouts as applicable. Although the name of *Mysidopsis bahia* has officially been changed to *Americamysis bahia*, the former name is referenced because of its use in the EPA method manuals and most NPDES permits.

Acute Test Biological Summ	ary Data	61		Sample	Concentra	tion (%)	
Species-Method	Endpoint	Control	3.50	7.00	14.0	28.0	100
M. bahia EPA 2007.0	Survival (%):	100	100	100	100	100	100
C. variegatus EPA 2004.0	Survival (%):	100	100	100	100	100	100

Chronic Test Biological Summary Data		3	Sample Concentration (%)						
Species-Method	Endpoint	Control	0.50	0.90	1.80	3.60	100		
M. bahia EPA 1007.0	Survival (%):	95	93	100	95	93	98		
	Biomass (mg)	0.313	0.305	0.367	0.370	3.60	0.392		
	Fecundity (%):	27	45	33	32		26		
C. variegatus EPA 1004.0	Survival (%):	100	100	100	100	98	100		
	Biomass (mg):	1.020	1.146	1.059	0.993	93 0.337 25 98	1,020		



Test Information Species-Method	Start Date/Time End Date/Time	Organism Source	Hatch/Harvest Date/Time	Acclimation Temp.	Acclimation Water	Test Aerated?
M. bahia EPA 2007.0	9/17/09 1500 9/19/09 1450	CBI Stock	9/15/09 1100 9/16/09 1100	25° C	HWM ASW 20 g/kg sal.	Yes
C. variegatus EPA 2004.0	9/17/09 1510 9/19/09 1500	CBI Stock	9/5/09 1200 9/6/09 1200	25° C	HWM ASW 20 g/kg sal.	Yes
M. bahia EPA 1007.0	9/15/09 1215 9/22/09 1255	CBI Stock	9/7/09 1000 9/8/09 1000	25° C	HWM ASW 20 g/kg sal.	Yes
C. variegatus EPA 1004.0	9/15/09 1200 9/22/09 1215	CBI Stock	9/14/09 1630 9/15/09 1030	25° C	HWM ASW 20 g/kg sal.	Yes

Sample/Dilution Water Data	Acut	e Test		Chron	ic Test	
		Dilution	San	mple	Dilution	n Water
Water Quality Parameter (Units)	Sample	Water	Mean	Std. Dev.	Mean	Std. Dev.
Arrival Temperature (°C)	2	N/A	3	1.5	N/A	N/A
Use Temperature (°C)	25	26	26	0.5	25	0
Arrival Salinity (g/kg)	16	N/A	16	0	N/A	N/A
Use Salinity (g/kg)	20	20	20	0.5	20	0.5
pH (S.U.)	7.26	7.71	7.28	0.14	7.88	0.09
Dissolved Oxygen (mg/l)	6.2	7.3	4,7	2.0	7.3	0
Total Hardness (mg/l as CaCO ₃)	2980	N/A	2913	70	N/A	N/A
Alkalinity (mg/l as CaCO ₃)	106	. N/A	102	3.8	N/A	N/A
Total Residual Chlorine (mg/l)	<q.l.< td=""><td>N/A</td><td><q.l.< td=""><td>0</td><td>N/A</td><td>N/A</td></q.l.<></td></q.l.<>	N/A	<q.l.< td=""><td>0</td><td>N/A</td><td>N/A</td></q.l.<>	0	N/A	N/A
Ammonia (mg/l NH ₃ -N)	2.7	N/A	3.1	0.3	N/A	N/A

Dilution water = Hawaiian Marine Mix ASW made with deionized water

CBI Sample I.D.	Collection Date/Time	Date(s)/Time(s) 1 st Used in Tests	Date(s)/Time(s) Used in Renewals	Sample Adjustments
OMEG0903-A	9/15/09 0700	9/15/09 1200, 1215	9/16/09 1120, 1140	Salt Added
ОМЕG0903-B	9/17/09 0715	9/17/09 1315, 1330 9/17/09 1500, 1510	N/A	Salt Added Aerated 0-3 min
OMEG0903-C	9/18/09 0715	9/18/09 1150, 1200	9/19/09 1355, 1405 9/20/09 1125, 1140 9/21/09 1020, 1030	Salt Added, Aerated 0-4.5 min

Acute tests

Test: M. bahia 2007.0							<i>C</i> .	variega	rus 2004.	0		
% Conc:	Cont.	3.50	7.00	14.0	28.0	100	Cont.	3.50	7.00	_14.0	28.0	100
Temp.	25	25	25	25	25	25	25	25	25	25	25	25
(°C)	0	0	0	0	0	0	0	0	0	0	0	0
D.O.	7.2	7.1	7.1	7.1	7.0	6.7	7.1	7.1	7.1	7.0	7.0	6.6
(mg/l)	0.1	0.1	0.1	0.1	0.1	0.6	0.2	0.1	0.1	0.1	0.1	0.6
pН	7.91	7.89	7.91	7.93	7.93	7.90	7.92	7.89	7.91	7.80	7.93	7.88
(S.U.)	0.07	0.09	11.0	0.13	0.16	0.33	0.08	0.10	0.13	0.28	- 0.18	0.31



Test: M. bahia 1007.0						C. variegatus 1004.0						
% Conc:	Cont.	0.50	0.90	1.80	3.60	100	Cont.	0.50	0.90	1.80	3.60	100
Temp.	25	25	25	25	25	25	25	25	25	25	25	25
(°C)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
D.O.	7.0	6.9	6.9	6.8	6.8	6.1	7.0	7.0	6.9	- 6.9	6.8	6.0
(mg/l)	0.3	0.4	0.4	0.4	0.5	0.8	0.3	0.3	0.3	0.3	0.4	0.8
pН	7.77	7.75	7.76	7.74	7.78	7.69	7.70	7.72	7.72	7.73	7.71	7.58
(Ŝ.U.)	0.13	0.08	0.10	0.18	0.10	0.18	0.08	0.09	0.08	0.09	0.16	0.22
Salinity	20	20	20	20	20	20	20	20	20	20	20	20
(g/kg)	0.4	0.4	0.4	0.4	0.4	0.6	0.4	0.4	0.4	0.4	0.4	0.6

Species-Method (Ref. Test Date)	Data Source	% Control Survival	48-h LC50	95% C.L./A.L. for LC50	RTT in Control?
M. bahia 2007.0	RTT	100	526	481-576	Yes
(9/8/09-9/10/09)	CC	100	610	504-716	
C. variegatus 2004.0	RTT	100	1112	997-1239	Yes
(9/8/09-9/10/09)	CC	99	1094	925-1263	

Chronic Test QA/QC	Refere	nce Tox	icant: KC	Units:	mg/i_T	est Organ	ism Sour	e: CBI Stock	Cultures
Species-Method	Data	% S	urvival			Biomass (mg)		RTT in
(Ref. Test Date)	Source	Cont	NOEC	Cont.	NOEC	PMSD	IC25	IC25 A.L.	Control?
M. bahia 1007.0	RTT	90	250	0.36	250	29	349	N/A	Yes
(9/8/09-9/15/09)	CC	93	250	0.32	250	22	484	341-628	
C. variegatus 1004.0	RTT	98	1000	1.45	500	12	1069	N/A	Yes
(9/8/09-9/15/09)	CC	99	1000	1.26	500	14	954	611-1298	

Note: RTT = Reference Toxicant Test, CC = Control Chart, Cont. = Control group. Based on control chart data (n>62) fecundity (Method 1007.0) is not a sensitive endpoint for KCl toxicity and hence not reported; fecundity data available upon request.

The results of analysis contained within this report relate only to the sample as received in the laboratory. This report shall not be reproduced except in full without written approval from the laboratory.

APPROVED:

Peter F. De Lisle, Ph.D. **Technical Director**

GLOSSARY OF TERMS AND ABBREVIATIONS

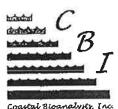
A.L. (Acceptance Limits): The results of a given reference toxicant test are compared to the control chart mean value ± 2 standard deviations. These limits approximate the 95% probability limits for the "true" reference toxicant value.

Chronic Value (ChrV): The geometric mean of the NOEC and LOEC. Units are same as test concentration units.

Page 3 of 4 Report Pages

Total No. Printouts/Bench Sheets Attached: 20

EPA Laboratory ID: VA01116



C.L. (Confidence Limits): These are the probability limits, based on the data set and statistical model employed, that the "true value" lies within the limits specified. Typically limits are based on 95% or 99% probabilities.

Control chart: A cumulative summary chart of results from QC tests with reference toxicants. The results of a given reference toxicant test are compared to the control chart mean value and 95% Acceptance Limits (A.L.) (mean ± 2 standard deviations).

IC25: The concentration of sample or chemical, calculated from the data set using statistical models, causing a 25% reduction in test organism growth, reproduction, etc. The lower the IC25, the more toxic the chemical or sample. Units are same as test concentration units.

LC50: The concentration of sample or chemical, calculated from the data set using statistical models, causing a 50% reduction in test organism survival. The lower the LC50, the more toxic the chemical or sample. Units are same as test concentration units. Note: The LC50 value must always be associated with the duration of exposure. Thus 48-h LC50, 96-h LC50, etc. are calculated.

LOEC: Lowest-observable-effect-concentration. The lowest concentration of sample or chemical in a chronic test dilution series in which the test organisms exhibit a statistically significant reduction in any of the test end points (e.g. growth, survival, reproduction) compared to control organisms. Units are same as test concentration units.

PMSD: Percent Minimum Significant Difference: The minimum difference which can exist between a test treatment and the controls in a particular test and be statistically significant; a measure of test sensitivity. The lower the PMSD the more sensitive the test.

N/A: Not applicable.

N/D: Not determined or measured.

NOAEC: No-observable-acute-effect-concentration. The highest concentration of sample or chemical in an acute test dilution series in which the test organisms exhibit no statistically significant reduction in the test end point (e.g. survival) compared to control organisms. Units are same as test concentration units.

NOEC: No-observable-effect-concentration. The highest concentration of sample or chemical in a chronic test dilution series in which the test organisms exhibit no statistically significant reduction in any of the test end points (e.g. growth, survival, reproduction) compared to control organisms. Some regulatory definitions also require that the NOEC be less than the LOEC. Units are same as test concentration units.

Q.L.: Quantitation Limit. Level, concentration, or quantity of a target variable (analyte) that can be reported at a specified degree of confidence.

T.U.: Toxic units. Expresses the relative toxicity of an effluent in such a manner that the larger the toxic unit value the more toxic the effluent T.U._{de} = 100/LC50. T.U._{de} = 100/NOEC. A dimensionless unit.

MYSIDOPSIS BAHIA STATIC ACUTE WET TEST 48-H TEST (AMB) FORM ETF10.11F

% Effluent	J.D.	Day 0	Day 1 Live	Day 2 Live	Final % Survival
Lab	C-A	10	10	10	
Control	C-B	(0)	10	10	100
	1-A	10	10	10	
3.50	1-B	10	10	10	(00
2 .	2-A	oį	10	10	
2.00	2-B	10	10	lo	100
	3-A	10	10	10	
14.0	3-B	10	10	10	100
28.0	4-A	10	10	10	
W. S. C	4-B	(0	10	10	100
10.5	5-A	10	10	10	
100	5-B	(3	10	10	100
	initials:		PB	PB	Ĭ
Count	Time:	1500	0900	1450	*Test End Time

Parameter	Treatment i.D.	Day 0	Day 1	Day 2
-	С	25	كنت	25
Temp.	1	75	25	25
(°C)	,2	25	25	25
	3	25	25	25
-	4	75	25 25	25
	5	25	25	25
	C	7.93	7.97	7.93
рН	1	7.90	7.98	7.88
(S.U.)	2	7.78	7.99	7.95
	3	7.78	8.04	7.97
	4	7.74	8.05	7.99
	5	7.52	8.07	8,10
	С	7.3	7.1	7.1
D.O.	1	7.2	7./	7.0
(mg/l)	2	7.2	7.1	1.1
	3	7.1	70	7.1
[4	7.0	7.0	7.1
	5	6.00	7./	7.1
	С	20		21
Salinity	1			
(g/kg) '	2			
	3			A STATE
	4			
	5	20		21
Replicate Mea	esured:	A	В	A
	tials:	80	PB.	bisa
TRC (mg/	1) In highest o	conc, at end of	test:	NA

COASTAL BIOANALYSTS, INC EFFECTIVE DATE: 2/1/09

Species: Mysidopsis (Americamysis) bahia
Source: CBI stock cultures
Other:
Harvest: Date/time start: 9/15/09 1100
Date /time end: 9/11/09 1100
Acclimation: Water: ASW 20 g/kg salinity
Other
Temperature (°C): 2-5
Feeding: Prior to test: Artemia ad libitum During test: Artemia nauplii ca. 100 /mysid/day
Illumination: 16L:8D 10-20 uE/m²/s
Test chamber size:400 ml250 ml
Solution volume:ml
Number of replicates/treatment: 2
Initial number of mysids/replicate; 10
Set up: Date (Day 0): 9/17/09
Time water added: 1445
Time mysids added: (500
Set up by (initials):
NOTES: (1) D.O. Dropped to 7.1 Test Aurastod (2) 1000. RB
€

Peer Rev. by: Pt Date: 9/28/09	eer Rev. by:_	pel		Date:	9/28	09
--------------------------------	---------------	-----	--	-------	------	----

CYPRINODON VARIEGATUS STATIC ACUTE WET TEST 48-H TEST (ACV) FORM ETF1021E

% Effluent	I.D.	Day 0	Day 1 Live	Day 2 Live	Final % Survival
Lab	C-A	10	10	10	
Control	С-В	10	10	10	100
_	1-A	13	10	10	
3,50	1-B	10	10	10	7100
0	2-A	10	10	(0	
7.00	2-B	10	10	10	100
14.0	3-A	10	10	(0)	
	3-B	10	(D	Lo	100
	4-A	13	10	10	
38.77	4-B	10	10	10	100
प्रधा	5-A	10	10	10	
	5-8	10	10	10	100
li	initials:		PB	PB	
Count	Time:	1510	0905	1500	Test End

Parameter	Treatment I.D.	Day 0	Day 1	Day 2
	С	85	75	25
Тетр.	1	25 .	25	125
(°C)	, 2	25	25,	25
	3	25	25	25
	4	>5	25	25
	5	25	25	25
	С	7.83	7.99	7.89
pН	1	7.80	8.00	7.88
(S.U.)	2	7.78	8-03	7.93
j	3	7.78	8.09	7.54
1	4	7.74	8.10	7.94
	5	7.52	8.10	8.01
	С	7.3	7.0	7.0
D.O.	1	7,2	7.0	7.1
(mg/l)	2	72	7.1	7.1
	3	7.1	6.9	69
19	4	70	6.9	1.1
f	5	4.00	10.9	7.0
	С	20		21
Salinity	1			
(g/kg)	2			
Ī	3			
ŀ	. 4	100		
ľ	5	20		21
Replicate Me	asured:	A	B.	ρ
In	itials:	PR	RB	bie
TRC (mg/	l) in highest o	onc, at end of	test:	NA

COASTAL BIOANALYSTS, INC EFFECTIVE DATE: 2/1/09

Species: Cyprinodon variegatus
Source: CBI stock cultures
Other:
Hatch: Date/time start: 9/5/09 1207
Date /time end: 9/6/09 /200
Acclimation: Water: ASW, 20 g/kg salinity
Other
Temperature (°C): 25
Feeding: Prior to test: Arlemia ad libitum During test: Not fed
illumination: 16L:8D 10-20 uE/m²/s
Test chamber size:400 mlml
Solution volume:mi
Number of replicates/treatment: 2
Initial number of fish/replicate: 10
Set up: Date (Day 0): 9/17/09
Time water added: 1945
Time fish added: 1510
Set up by (initials): <u>P./5</u>
MOTES: (1) D.O. deopped to 4.0 Aeration State at (2) (1000). P.S.
* 9 x =

BASELINE TEST INFO - MYSID 7 DAY TEST

Coastal Bioanalysts, Inc Form ETF0011D Effective Date: 2/1/09

TEST ORGANISM INFO Species: Mysidopsis (Americamysis) bahia Source: CBI Stock Cultures: Other: Temp. (*C): 75 Harvest Date/Time: From 9/1/09 (1000 Feeding Prior to Test: Artemia ad libitum 2 To 9/8/09/1000 Feeding During Test: Artemia ca. 75/mysk Arrival Date: Number of Replicates/Concentration: Other Number of Replicates/Concentration: Other Other Time Water Added: 1/40 Set Up Date: 9/15/09 Time Animals Added: 1/315 NOTES Peer Review by 65/40 Date 9/25/09 Date 9/25/09)⊛	
Source: CBJ Stock Cultures:	TEST ORGANIS	SM INFO	*	
Other: Temp. (°C): 75 Harvest Date/Time: From 9/2/09 (200) To 9/8/03/1000 Feeding Prior to Test: Artemia ad fibitum 2 Feeding Prior to Test: Artemia ad fibitum 2 Feeding During Test: Artemia ca. 75/mysk Arrival Date: (non-CBI) Feeding Prior to Test: Artemia ad fibitum 2 Feeding During Test: Artemia ca. 75/mysk Arrival Date: (non-CBI) Feeding Prior to Test: Artemia ad fibitum 2 Feeding Prior to Test: Artemia ad f	Species:	Mysidopsis (Americamysis) bahla	Acclimation: Water	r: ASW 20 g/kg salinity_
Harvest Date/Time: From 9/2/09 (1000 Feeding Prior to Test: Artemia ad libitum 2 To 9/8 (103 1000 Feeding During Test: Artemia ac. 75/mysic Arrival Date: n. : 2 (non-CBI) TEST DESIGN Test Chamber: 1000 ml Tri-pour Beaker Illumination: 16:8 L:D 10-20 uE/m²/s Other Number of Replicates/Concentration: Initial Number of Mysids/Replicate: Other Other TEST SET UP (Day 0) Set Up Date: 9/15/09 Time Water Added: 1/40 Time Animals Added: 1/215	Source:	CBI Stock Cultures:		Other:
To 918/03 1000 Feeding During Test: Artemia ca. 75/mysic Arrival Date: 62:3 (non-CBI) TEST DESIGN Test Chamber: 1000 ml Tri-pour Beaker Illumination: 16:8 L:D 10-20 uE/m²/s Number of Replicates/Concentration: Initial Number of Mysids/Replicate: Other Initial Number of Mysids/Replicate: Other Initial Number of Mysids/Replicate: Other Initial Number of Mysids/Replicate: Itime Water Added: 1/40 Itime Water Added: 1/40 Itime Animals Added: 1/215 Itime Animals Add		Other:	Tem	p. (°C): 75
Arrival Date: (non-CBI) TEST DESIGN Fest Chamber: 1000 ml Tri-pour Beaker Illumination: 16:8 L:D 10-20 uE/m²/s Other Number of Replicates/Concentration: Initial Number of Mysids/Replicate: Other Time Water Added: 1/40 Set Up Date: 9/15/9 Time Animals Added: 12-15	Harvest Date/Ti	ime: From 9/7/09 (000	Feeding Prior to Test:	Artemia ad libitum 2X/da
(non-CBI) TEST DESIGN Fest Chamber: 1000 ml Tri-pour Beaker Illumination: 16:8 L:D 10-20 uE/m²/s Other Number of Replicates/Concentration: Initial Number of Mysids/Replicate: Other Other TEST SET UP (Day 0) Set Up Date: 9/15/09 Time Water Added: 1/40 Set Up By: PS Time Animals Added: 12-15		To 918/09 1000	Feeding During Test:	Artemia ca. 75/mysid, 2X
Set Up By: PS Time Animals Added: 13-15 10-20 uE/m²/s 1000 ml Tri-pour Beaker Illumination: 16:8 L:D 10-20 uE/m²/s Number of Replicates/Concentration: Initial Number of Mysids/Replicate: Other				<u>v : y</u>
Other	rest design			
Initial Number of Mysids/Replicate: Other TEST SET UP (Day 0) Set Up Date: 9/15/09 Time Water Added: 1/40 Set Up By: PB Time Animals Added: 1/215 NOTES	lest Chamber:	1000 ml Tri-pour Beaker	Illumination: 16:8 I	_:D 10-20 uE/m²/s
Other TEST SET UP (Day 0) Set Up Date: 9/15/09 Time Water Added: 1140 Set Up By: Po Time Animals Added: 13-15		Other	Number of Replicates	Concentration: 8
TEST SET UP (Day 0) Set Up Date: 9/15/09 Time Water Added: 1/40 Set Up By: PS Time Animals Added: 1915 HOTES	iolution Vol:	200 ml	Initial Number of Mysi	ds/Replicate: 5
Set Up Date: 9/15/09 Time Water Added: 1140 Set Up By: PS Time Animals Added: 13-15 NOTES		Other	15	
Set Up By: PS Time Animals Added: 13-15	EST SET UP (C			
IOTES	et Up Date:	9/15/09	Time Water Added:	1140
IOTES	et Up By:	PB	Time Animals Added:	13-15
	IOTES		•	a: ¥
eer Review by <u>PS/U)</u> Date_ 9/28/09			8	
eer Review by <u>PS/U</u> 3 Date_ 9/28/09				
eer Review by <u>PS/43</u> Date <u>9/28/09</u>				
eer Review by <u>PS/48</u> Date <u>9/28/09</u>				
eer Review by PB/B Date 9/23/09				
	eer Review by_	P.S/Q3 Date 9/5	28/09	

O DO Dropped to 2.8 Alrahon Shanded at 1600. PB

Coastal Bioanalysts, Inc Form ETF0013C Effective Date: 11/27/07

	Effective Date: 11/27/07											
Treatment	Rep Ltr	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Final % Live			
11 edilingiit	A		5	1		9	4	14		1		
С	B	5	1 5	1	5	5	15	5	1			
Ū	c		5	17	5	5	1	5-	1	Ψ.		
	D	5	5	1					1			
	E	12		1-	5.1	5	5	5	95	f		
	F	5	5 5	 	5	-2-		Y	47	1		
		3		15	1-2	5	5		,			
	G	5	1	5	-5	5	5	5	ļ]		
~~	Н			1	S	5	5	5				
	A	5 5	5	5	5		5	40		1		
1	В		5	1	5	5	5	5		L		
	С	5	15	15	5	5			ļ	ŀ		
1,5096	D	گ.	5	5	S	5	5~	4				
% Conc.	E	5	5	5	5	5	5	5	93	JSARK Side of Seater		
	F	5	5	3	5	5	5	5		S:40 -0		
4	G	5	15	15	S	666	5	5	1	1- 14-6 94		
Vol. Spl.	Н	5	5	3	S		5	4		Beato.		
7 3 1 1	A		5	6	5	5	5	5-		1 2 cc		
2	B	5		3	5	5	5	5-		1		
_	c		<u> </u>	1-		5	5-		1	1		
1,90 40		5	5	3	5			5	ł	l		
	D	Ş	5	13	_ <	5	-5-	5	100	:00	l	
% Conc.	E	5	8	5	3	5	5			1		
	F	5	5	1	5	5-	5	5				ł
10.8	G	2	5	3	3		5	5-			ļ	
Vol. Spl.	Н	15	S	\$	5	5	5-	5		1		
	Α	<u>5</u>	5	5	5	4	4	4		t		
3	В	S	3	5	5	4	4	4	}	ł		
-	С	5	3		5	5	5	Š-				
,80%	D		3	1	5	5-	5-	Ć.	١	l .		
% Conc.	Ē	<u>\$</u>	5	3	5	5	5	5	95	Ī		
78 C OHIC.	F	1	5	-	5	5	5	5-				
N / / .	G	S 3		"5,			4			1		
21,6				3	5	55	5	5				
Vol. Spl.	H	5	5							1		
	A	5	3	3	S	5	40	Υ		ſ		
4	В	ک	3	-5	5	Ÿ	5	_5_				
	С	5	5	5	5		\$). \$	4		**		
. CO D 46	D	3	5	3	5	4	5	4	0.7	l		
% Conc.	E	5	5	5	5	5	5		93	ſ		
	F	_5	5	5	5		5	. 5	1			
43.2	G	5	5	5	3	5	5	5-				
Vol. Spl.	H	5	<u>5</u>	3	,5 ,5	5	5	Ĺ				
. J., Jp.,	A	τ_	5	8	5		5-	5-				
5	В	5 5		5	5	5	7	Ý				
3	C	=	<u>5</u>	<	3	5	5	-	98			
10 to		<u> </u>		3	5	2	N	5				
20 (0	D	<u></u>	5	5			5	5				
% Conc.	E	5 5	S 5	3	_5	دع	5					
	F	5			5	4		<u> </u>				
1200	G	5	3	5	5	5	3	7		l.		
Vol. Spl.	Н	3	3	Ś	5	5	3	2				
Renewal/Cou		1143 PB	1330 1B	נטמו	1405	1146	1030	1:3600				
		1170	7,00	PO	PB	CA	CB	SB	1.5			

Volume sample added to total volume of 1200. ml for preparation of dilutions. * Time of final count = test end time.

Test I.D.	OMEGOG	03	C	MB

Coastal Bioanalysts, Inc Form ETF0014G Effective Date: 10/31/08

	Rep	Females	Females	Melaa	lmma-	Pan	Total ¹	Tare
Treatment	Ltr	w/eggs	No eggs	Males	ture	No.	Wt (mg)	Wt (mg)
	A	_1	<u> 1</u>			1/	8.22	426
C	В		11/	-11		15	7.92	6.58
	C		· 11	-111		3	7,27	5,90
	D		111		ļ	14	9.39	6.48
ñ	E	- 17	7	11.		5	8.97	7.20
	F					1/2	8.68	5-33
	G	- Iu	11			17-	9.44	7.31
	Н		117	1		9	8.41	4,94
	Α		1	77	L		9.65	8.41
1	В			111		14	8.57	7.56
0 50	O ₁			11		111	8.67	7.12
0,50	Ū			1		18	8.46	2.10
% Conc.	E		11	<u> </u>		13	9.73	4.71
	F	- 11				15	7.69	5,98
	G	11					8.27	4.4.3
	Ħ.		111			14	8.48	7.55
	A		1111	-1		12	7.26	5,45
2	В		117		ļ	18	7.08	5.44
A 00	C		117			19	7.45	5.93
0.90	D	17	11	_1		24	9.20	7.140
% Conc.	Ē		_17			5)	8.69	7.85
	F		_4			23	10.21	8.15
	G H	1111				23	10.10	7.61
			17	111		24	8.04	(0.31
. !	. A					25	8.53	4.88
3	В	U	_1/			26	8.87	7.58
4 010	С	1	111	_1		32	10.22	2.98
1,80	D			11)	r	38	9.44	8.44
% Conc.	Ε			1131		24	11.28	9.34
	F			17		34	9.05	7.45
}	G	"		4		31	8.68	4.44
	Н			1)		35	(0.92	8.82
	Α		1	_1)		33	9.37	7.94
4	В	11		_1		34	10.23	8.32
	С	_1	_ \			35	\$.78	5.75
3,46	D		LUL			34	9.56	8.01
% Conc.	E		111	11-		22	9.64	80.8
1	F		111	1	.	35	8.07	6.44
ļ	G			7777		39	10.79	8.64
	H		1)			40	9.03	7.18
_]	A	1	11			41	10.53	8.28
5	В			11x		43	10.18	8.40
	C		-un	-;		4.7	10.23	8,55
1777	D		111	77		44	10.84	8.41
% Conc.	E	1	11)			Ŋż	9.21	2.74
	F		111	_11		46	10.43	8.50
	G	111				42	10.21	2.44
1	H	111	11			48	10.50	8.37

See printout of statistical analyses for biomass weights by replicate.

True value ± estimated uncertainty of calibration weight (NIST traceable annual certification) = 1440 ± 9.05 mg

TARE WT: DATE: 125 INITIALS: 15 CALIB. CHECK (10.00 mg²): 14.(1)

TOTAL WT: DATE: 9/25 INITIALS: 96 CALIB. CHECK (10.00 mg²): 10.00

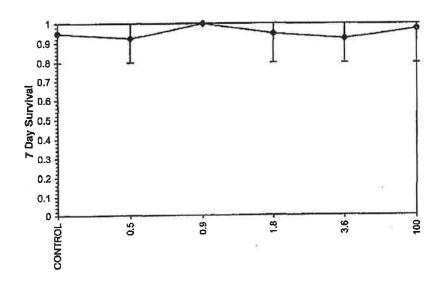
SEXED BY: 68

	S SEE		Mysid	Survival,	Growth a	nd Fecu	ndity Test	7 Day S	
Start Date: End Date: Sample Date: Comments:	9/15/2009 9/22/2009		Lab ID:	OMEG090 CBI EPAM 94-		ne	Sample ID Sample Ty Test Spec	/pe:	OUTFALL 003 WW MY-Mysidopsis bahla
Conc-%	1	2	3	4	5	6	7	8	
CONTROL	0.8000	1.0000	1.0000	1.0000	1.0000	0.8000	1.0000	1.0000	01
0.5	0.8000	1.0000	1.0000	0.8000	1.0000	1.0000	1.0000	0.8000	
0.9	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
1.8	0.8000	0.8000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
3.6	0.8000	1.0000	0.8000	0.8000	1.0000	1.0000	1.0000	1.0000	
100	1.0000	0.8000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	

			Tra	ansform:	Arcsin Sc	uare Roo	ŧ	Rank	1-Tailed	
Conc-%	Mean	N-Mean	Mean	Min	Max	CV%	N	Sum	Critical	
CONTROL	0.9500	1.0000	1.2857	1.1071	1.3453	8.574	8			
0.5	0.9250	0.9737	1.2560	1,1071	1.3453	9.813	8	64.00	46.00	
0.9	1.0000	1.0526	1.3453	1.3453	1.3453	0.000	8	76.00	46.00	
1.8	0.9500	1.0000	1.2857	1.1071	1.3453	8.574	8	68.00	46.00	
3.6	0.9250	0.9737	1.2560	1.1071	1.3453	9.813	8	64.00	46.00	
100	0.9750	1.0263	1.3155	1.1071	1.3453	6.400	8	72.00	46.00	

Auxillary Tests		2000			Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates nor Equality of variance cannot be co		stribution	(p <= 0.01)		0.77039	0.929	-1.0511	-0.4334
Hypothesis Test (1-tall, 0.05)	NOEC	LOEC	- ChV	TU				
Steel's Many-One Rank Test	100	J>100		1				

Dose-Response Plot



										_
			My	sid Surviv	al, Growt	h and Fe	cundity Te	st-Biom	ass	
Start Date:	9/15/2009	12:15		OMEG090			Sample ID		OUTFALL 003	
End Date:	9/22/2009	12:55	Lab ID:	CB!			Sample Ty	/pe:	ww	
Sample Date:			Protocol:	EPAM 94-	EPA Mari	ne	Test Spec	ies:	MY-Mysidopsis bahla	
Comments:										
Conc-%	1	2	3	4	5	6	7	8		
CONTROL	0.2920	0.2680	0.2740	0.2820	0.3540	0.2920	0.4460	0.2940	K.	
0.5	0.2480	0.2660	0.3100	0.3120	0.4040	0.3420	0.3680	0.1860	•	
0.9	0.2620	0.2880	0.3440	0.4080	0.3740	0.4120	0.4980	0.3460	f	
1.8	0.3300	0.3220	0.4480	0.3200	0.3840	0.3200	0.4160	0.4200	1	
3.6	0.3020	0.3820	0.3020	0.3100	0.3120	0.2860	0.4300	0.3700	1	
100	0.4500	0.3440	0.3360	0.4460	0.2940	0.3860	0.4540	0.4260	1	

				Transform	n: Untran	sformed	602	1-Tailed		Isotonic		
Conc-%	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD	Mean	N-Mean
CONTROL	0.3128	1.0000	0.3128	0.2680	0.4460	19.154	8				0.3471	1.0000
0.5	0.3045	0.9736	0.3045	0.1860	0.4040	22.935	8	0.265	2.306	0.0718	0.3471	1.0000
0.9	0.3665	1,1719	0.3665	0.2620	0.4980	20.405	8	-1.727	2.306	0.0718	0.3471	1.0000
1.8	0.3700	1.1831	0.3700	0.3200	0.4480	14.374	8	-1.839	2.306	0.0718	0.3471	1.0000
3.6	0.3368	1.0767	0.3368	0.2860	0.4300	15.128	8	-0.771	2.306	0.0718	0.3471	1.0000
100	0.3920	1.2534	0.3920	0.2940	0.4540	15.654	8	-2.546	2,306	0.0718	0.3471	1.0000

Auxillary Tests					Statistic	-	Critical		Skew	Kurt
Shapiro-Wilk's Test indicates nor Bartlett's Test indicates equal var			.01)		0.96204 1.48277		0.929 15.0863		0.30422	-0.3412
Hypothesis Test (1-tall, 0.05)	NOEC	LOEC	ChV	TU	MSDu	MSDp	MSB	MSE	F-Prob	df
Dunnett's Test	100	>100		1	0.07176	0.22946	0.00963	0.00387	0.04645	5, 42

Mysid Survival, Growth and Fecundity Test-Biomass
Test ID: OMEG0903MB Sample ID: OU
Lab ID: CBI Sample Type: WM

Start Date: End Date:

9/15/2009 12:15 9/22/2009 12:55

Sample ID: Sample Type:

OUTFALL 003 ww

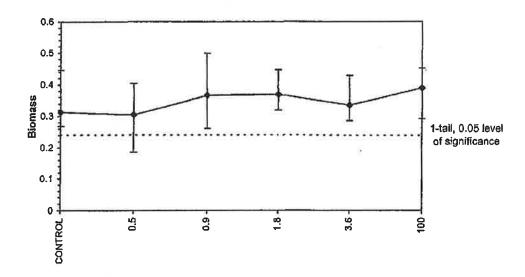
Sample Date: Comments:

Protocol: EPAM 94-EPA Marine

Test Species:

MY-Mysidopsis bahia

Dose-Response Plot



	1					and re	cundity Te			
Start Date:	9/15/2009	12:15	Test ID:	OMEG090	3MB		Sample ID);	OUTFALL 003	
End Date:	9/22/2009	12:55	Lab ID:	CBI			Sample Ty	/pe:	WW	
Sample Date:			Protocol:	EPAM 94-	EPA Marii	ne	Test Spec	ies:	MY-Mysidopsis bahia	
Comments:										
Conc-%	1	2	3	4	5	6	7	8		
CONTROL	0.3333	0.0000	0.0000	0.0000	0.6667	0.3333	0.6000	0.2500		
0.5	0.0000	0.5000	0.6667	0.6667	0.3333	0.5000	0.6667	0.2500		
0.9	0.0000	0.2500	0.2500	0.5000	0.3333	0.3333	1.0000	0.0000	F	
1.8	0.3333	0.5000	0.2500	0.5000	0.0000	0.0000	0.6667	0.3333		1000
3.6	0.5000	0.5000	0.6667	0.0000	0.0000	0.0000	0.0000	0.3333		
100	0.5000	0.0000	0.0000	0.0000	0.2500	0.0000	0.7500	0.6000		

			Tra	ansform:	Arcsin Sc	quare Roo	77		1-Tailed	
Conc-%	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
CONTROL	0.2729	1.0000	0.5679	0.2928	0.9553	44.737	8			
0.5	0.4479	1.6412	0.7421	0.3614	0.9553	30.081	8	-1.304	2.306	0.3081
0.9	0.3333	1.2214	0.6245	0.2527	1.3181	51.891	8	-0.424	2.306	0.3081
1.8	0.3229	1.1832	0.6371	0.2928	0.9553	31.971	8	-0.518	2.306	0.3081
3.6	0.2500	0.9160	0.5579	0.2527	0.9553	48.969	8	0.074	2.306	0.3081
100	0.2625	0.9618	0.5721	0.2255	1.0472	53.285	8	-0.032	2.306	0.3081

Auxiliary Tests					Statistic		Critical		Skew	Kurt
Shapiro-Wilk's Test indicates nor	mal distribu	ition (p > 0	.01)		0.95445		0.929		0.46306	-0.2352
Bartlett's Test indicates equal var					2.05791		15.0863			
Hypothesis Test (1-tall, 0.05)	NOEC	LOEC	ChV	TU	MSDu	MSDp	MSB	MSE	F-Prob	df
Dunnett's Test	100	>100		1	0.22328	0.77187	0.03846	0.07141	0.74584	5, 42
	A	1								

150% contro w/ 25%. 10

BASELINE TEST INFO - SHEEPSHEAD 7 DAY TEST

Coastal Bioanalysts, Inc Form ETF0021C Effective Date: 2/1/09

IEST OKGANI	SIM HALO		`*			
Species:	Cyprinodon variega	tus	Acclimation:	Water: A	ASW 20 g/kg sali	inity
Source:	CB! Stock Cultures:	<u></u>		X (a)	Other:	
	Other:			Temp. (°	C):_ 3:5	
Hatch Date/Tim (start)		1630	Feeding Prior (to Test: Art	emia ad libitum:	2X/day
Hatch Date/Tim (end)	e: 9115/09	1630	Feeding During	g Test: Arte (2X/d	emia 0.1 g/rep da lay) 0.15 g/rep d	ays 0-2 Jays 3-6
			Arrival Date: (non-CBI)	***	P Kr	~
rest design				40		
lest Chamber:	1000 ml Tri-pour bea	aker	Illumination:	16:8 L:D	10-20 uE/m²/s	
	Other		Number of Rep	llcates/Co	ncentration:	4
Solution Vol:	750 ml	· · · · · · · · · · · · · · · · · · ·	Initial Number	of Fish/Rep	olicate:	10
	Other					
EST SET UP (C	Day 0)	(8)				ж у
Set Up Date:	9/15/09	*******	Time Water Add	ied: _	1140	742
et Up By:	<u>PB</u>		Time Animals A	dded: _	1200	
			<i>(</i> *)		*:	
OTES		20				
					ura	<u> </u>
			V			
	······································					
	······································	***	************			
eer Review by_	PB/UR	Date_ 9/29	3/09			

EFFECTIVE DATE: 6/30/07

Para-	Treat-	Day 0	Day Final	/1 Initial	Day Final	/ 2 Initial	Day Final	y 3 Initial	Day Final	4 Initial	Day Final	/ 5 Initial	Day Final	y 6 Initial	Day 7 Final
meter	ment	Initial 2-6	25	26	25	7-5	25	26	25	26	25	25	25	25	25
E	1	26	25		25	25	25	26	25	26	25	25	70	25	25
M	2	26	25	24 24	25	25	25	26	26	7%	2 +	25	34	25	25
P	3	26	25	26	25	25	25	n	25	26	25	25	3 5	25	35
1	4	24	25	26	25	25	25	24	25	26	25	25	25	25	25
(°C)	5	26	25	22	ي گھ	75	25	vs	25	26	25	25	25	25	35
	С	7.82	7.64	7.67	7.44	-7.69	7.73	1.76	7.78	7.73	2.41	7.11	7.51	2.78	2.43
pН	1	7.82	7.45	7-47	7-1250	7.70	7.85	7.750	7.50	7.73	2.23	2.77	2.43	2.29	2.29
1	2	7.82	7-62	7.47	7.46	2.10	7.86	718	2.77	7-73	7.62	2.29	2.44	279	7.70
(s.u.)	3	7.82	7.65	7.47	7.47	7-10	7.88	275	7.65	7.79	2.42	7.83	2.59	2.85	2.77
1	4	7.82	7.46	7.47	7.67	7.70	7.90	7.79	7.82	7,73	7.33	7.83	7.45	7.57	7.46
25.	5	746	7.46	7.39	7-69	7.22	7.91	7.18	7.67	7.37	2.24	7.63	2.86	7.58	7.73
	C	7.3	4.2	7.0	4.5	1.1	71	7.3	6.8	7.1	7.1	2.2	21	7:1	7.0
D.O.	1	7-3	6.2	7.0	63	7.1	7./	7.2	6.3	7-1	2.1	2.3	7.1.	2.0	44
1	2	7.2	10.1	7.0	4.8	7.1	7.0	20	6.8	7.2	7.0	22	2.1.	4.8	4.9
(mg/l)	3	7.2	61	7.0	le.6	7.1	6.9	2.0	6.4	7.1	7.0	2.2	2.1	4.6	40.8
ì	4	7.2	6.0	6.2	6.0	7.0	6.8	6.9	1.1	7.2	4.8	7.1	7.1	4.4	4.8
	5	6.2	5.9	5.3	5.4	4.43	6.7	5,6	5.7	5.6	4.5	20	2.0	4.	6.7
S	C		70		26		24		20		24		21		20
Α	1		20		20		21		20		76		37		20
L	2		20				21		20		21	1	26		as as
1	3				20		21		20		26		24		94
N	4		20	\$10 × 30	20		21		20		as		24		2.17
(g/kg)	5		20		20		21		20		3 2 2		19		20
R	eplicate:	A	В	C	D	B	A	C	0	B	1	۵	A	B	Ċ
	Initials:	RB	PB	CB	PB	PB	83	PO	by	PB	CO	CB	LIB	GB	Co.

A.O. Dropped to 1.8.
Agration Stanted 1600 ps

_		Rep			Numb	er of Live	Fish			Fish (Dry Weight Da	ata (mg) ²	
	Treatment ¹	Ltr	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Pan#	Tot. Wt.	Tare Wt.	Notes
1		Α	10	10	16	10	10	103	10	44	19.83	9.40	
디	CONTROL	В	1.0	10	10	10	14	61	10	5-61	16.36	7.50	
		C	10_	10	fo	סו	10	10	10	51	19.85	9.1)	
		D	10	10	io	10	0	10	f·0	5-2	20.38	9.52	
7		A	۱۵.	10	10	10	10	10	10	53	17.76	7.52	<u> </u>
1	C: 0.50%	В	Lo	10	15	10	10	20	10	54	18.88	2.02	
1		C	10	10	10	io	10	10	00	55	19.21	7.88	
1	V: 12	D	10	10	10	10	10	10	10	56	20.39	7.82	
7		A	σĮ	10	10	10	10	(0)	10	52	17-59	7.12	
2	C:0,909	В	10	1.0	10	10	10	10	LU	58	18.80	8.65	•
	152	C	10	10	(3	10	(1)	10	(8)	59	21.15	932	
	V:21.4	D	10_	10	10	16	10	20	10	40	17.97	8.01	
		A	ID.	10	(2)	10	ta	10	10	41	18-46	8.45	
3	C: 1.80%	В	ID	10	10	10	13	10	10	42	17.03	8.12	
		C	10	16	10	10	14	10	10	203	18.66	7.48	
	N: 43.5	D	10	10	10	10	10	1A	19	44	19.35	9.64	
		A	iD	10	10	10	110	10	10	45	19.10	9.32	
4	C: 3. 60 208	В	1 (0	10	(5	10	10	1A	10	406	18.08	8.02	
	, ,,	С	10	10	(2	10	14	14	10	102	19.38	8.23	
	V: 86.4	,D	10	10	10	lio	10	10	9	46	16.64	8.43	
Γ		Α	10	10	10	10	10	10	10	49	16.93	7.36	
5	C: 150%	В	10	10	19	10	10	10	10	20	17-41	7.06	
1		C	10	10	10	10	10	10	10	71	17.55		
L	1: 2700	D	10	10	0,	10	10	10	10	122	16.45	2.93	4
	Renewal/Cou		1100	1315	1150	1355	1125	1020	1215	-	it: Date: 4(2)	Calib. Chk (10	0.00 mg ⁴): (a,4) Init: Cg
		Initials	1B	िष्ठ	10	6	CA	1 GB	MB				0.00 mg ⁴): 10.00 lnit: Rg

C = Concentration; V = Volume (ml) sample added to total volume of <u>a Vot</u> mt for preparation of solutions. See printout of statistical analyses for biomass weights by replicate.

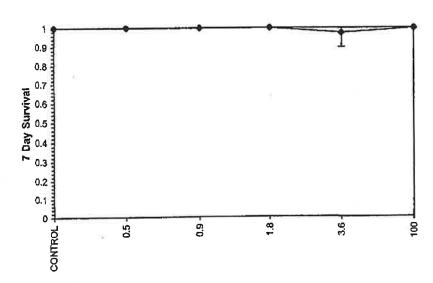
Time of final count = test end time. True value + estimated uncertainty of calibration weight (NIST traceable annual certification) = 10.01 + 0.65 mg

Start Date:	9/15/2009	12:00	Test ID:	OMEG0903CV	Sample ID:	OUTFALL 001
End Date:	9/22/2009			CBI	Sample Type:	ww
Sample Date: Comments:	G/ 2.52.555	12.10		EPAM 94-EPA Marine	Test Species:	CV-Cyprinodon variegatus
Conc-%	1	2	3	4		
CONTROL	1.0000	1.0000	1.0000	1.0000		
0.5	1.0000	1.0000	1.0000	1.0000		
0.9	1.0000	1.0000	1.0000	1.0000		
1.8	1.0000	1.0000	1,0000	1.0000		
3.6	1.0000	1.0000	1.0000	0.9000		
100		1.0000	1.0000	1.0000		

			Tra	ansform:	Arcsin Sc	uare Roof		Rank	1-Tailed	
Conc-%	Mean	N-Mean	Mean	Min	Max	CV%	N	Sum	Critical	
CONTROL	1.0000	1,0000	1.4120	1.4120	1.4120	0.000	4			
0.5	1.0000	1.0000	1.4120	1,4120	1.4120	0.000	4	18.00	10.00	
0.9	1.0000	1.0000	1,4120	1.4120	1.4120	0.000	4	18.00	10.00	
1.8	1,0000	1.0000	1.4120	1.4120	1.4120	0.000	4	18.00	10.00	
3.6	0.9750	0.9750	1.3713	1.2490	1.4120	5.942	4	16.00	10.00	
100	1.0000	1.0000	1.4120	1.4120	1.4120	0.000	4	18.00	10.00	

Auxiliary Tests					Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test Indicates nor Equality of variance cannot be co		stribution (p <= 0.01)		0.46508	0.884	-3.0206	13.9892
Hypothesis Test (1-tall, 0.05)	NOEC	LOEC	ChV	TU				
Steel's Many-One Rank Test	100	>100		1				

Dose-Response Plot



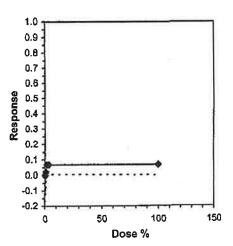
				val Fish Growth and S		
Start Date:	9/15/2009	12:00	Test ID:	OMEG0903CV	Sample ID:	OUTFALL 001
End Date:	9/22/2009	12:15	Lab ID:	CBI	Sample Type:	ww
Sample Date:			Protocol:	EPAM 94-EPA Marine	Test Species:	CV-Cyprinodon variegatus
Comments:						
Conc-%	1	2	3	4		
CONTROL	1.0390	0.8860	1.0740	1.0810		
0.5	1.0190	1.1810	1.1330	1.2520		
0.9	1.0470	1.0150	1,1780	0.9960		
1.8	1.0410	0.8910	1.0680	0.9710		
3.6	1.0730	1.0060	1.1150	0.8610		
100	0.9570	1.0350	1.2340	0.8520		

	-	Transform: Untransformed				1-Tailed			Isotonic			
Conc-% Mean N	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD	Mean	N-Mean	
CONTROL	1.0200	1.0000	1.0200	0.8860	1.0810	8.941	4				1.0831	1.0000
0.5	1.1463	1.1238	1,1463	1.0190	1.2520	B.542	4	-1.661	2.410	0.1832	1.0831	1.0000
0.9	1.0590	1.0382	1.0590	0.9960	1.1780	7.750	4	-0.513	2.410	0.1832	1.0590	0.9777
1.8	0.9928	0.9733	0.9928	0.8910	1.0680	7.978	4	0.358	2.410	0.1832	1.0087	0.9313
3.6	1.0138	0.9939	1.0138	0.8610	1.1150	10.978	4	0.082	2.410	0.1832	1.0087	0.9313
100	1.0195		1.0195	0.8520	1.2340	15.838	4	0.007	2.410	0.1832	1.0087	0.9313

Auxiliary Tests					Statistic		Critical		Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)				0.97698			0.884		0.032	-0.2074
Bartlett's Test indicates equal var					2.0883		15.0863			
Hypothesis Test (1-tail, 0.05)	NOEC	LOEC	ChV	TU	MSDu	MSDp	MSB	MSE	F-Prob	df
Dunnett's Test	100	>100		1	0.18324	0.17964	0.0123	0.01156	0.41252	5, 18

Linear Interpolation (200 Resamples)

Point	%	SD	95% CL(Exp)	SKew
IC05	1.4370			
IC10	>100			
IC15	>100			
IC20	>100	,		
IC25	>100	,/		
IC40	>100			
IC50	>100			



Start Date: 9/15/2009 12:00 End Date:

9/22/2009 12:15

Larval Fish Growth and Survival Test-7 Day Biomass
Test ID: OMEG0903CV Sample ID: OUTFALL 001
Lab ID: CBI Sample Type: WW

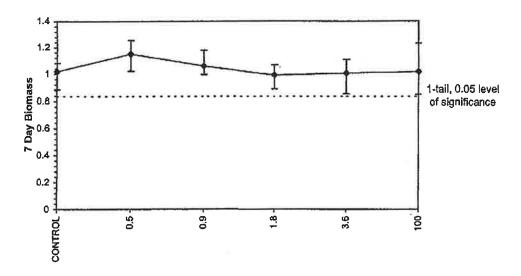
Sample Date: Comments:

Protocol: EPAM 94-EPA Marine

Test Species:

CV-Cyprinodon variegatus

Dose-Response Plot



COASTAL BIOANALYSTS, INC **EFFECTIVE DATE: 2/1/09**

····	11	IITIAL SAN	IPLE CHAR	ACTERIZA	TION1			
Sample Bottle ²	A-1	P>-(C-1	1		NOTES:		ş
Tot. Res. Chlorine (mg/l)	LQ.L.	<q.l.< td=""><td>422</td><td></td><td></td><td></td><td></td><td>*</td></q.l.<>	422					*
Hardness (mg/l CaCO ₃)	2840	2980	2920] "			100
Alkalimity (mg/l CaCO ₃)	99	100	144					
N H ₃ -N (mg/l)	2.2	3,2	3,3]		•	
Color/Appearance ³	CY	CY	CY]			
Obvious Odor?	NO	No	100					
Date/Time	9/14/09/195	2/1/09/00	9/18/10/5]			
Initials	PB	PB	bia	ì				
SAI	MPLE PREF	ARATION	MEASURE	MENTS (10				
Sample Bottle ²	A-1	A-2	B-1	01	C-2	0.3	6-1	B-Z
Prep Temperature (°C)	24	26	25	25	24	25	26	25
Initial Salinity (g/kg)	16	16	16	16	16	150	16	16
Adjusted Salinity (g/kg)	20	20	20	w	20	19	19	20
DO (mg/f) After Warm/Sal	6.2	4.4	5,5	4.3	4.4	2.3	1.1	3.4
Aeration Time (min)	_	_	-		,—.		4.5	3.0
Adjusted D.O.		_		-	-		5.2	10.2
Final pH (S.U.)	7.31	7.23	7.35	7.08	7.13	7.44	7.42	7.26
Tot. Res. Chlorine (mg/l)4	n.b.	۸.۵.	N.D.	Nix	ND	N.D	N.D.	n.b.
Sample Filtered (60 um)?	Nο	ΛÞ	No	No	1.0	مادم	بزرم	no
Date/Time	9/15/09/135	VINO9 1130	9/17/09/305	Alay Irz	9/19 1320	9/34/115	4131 145	9/17/09 1420
Initials	PS	RS	AS.	Co	PB	en	CB	PB
	D	ILUTION W	ATER CHA	RACTERIS	STICS			
Vat Number/Letter	D	Д	4	Ď	D	7	0	F
Temperature (°C)	25	25	25	25	25	25	a5 ·	26
Salinity (g/kg)	20	20	21	21	20	20	20	20
D.O. (mg/l)	7.3	7.3	7.3	7.3	7.3	2.3	7.3	7.3
pH (S.U.)	7-74	783	295	7-99	つぶろ	2.99	7.86	7.71
Date/Time	9/15/09/0845	9/14/08 0830	9/11/09 07/5	9/18/09 0315	9/19/09 1300	9/84 1616	422/100	
Initials	RB	PB	PB	MS	PB	Cig	un	PB
				ALA ALALA	- Bashla			

¹Q.L. = Quantification Limit, N.D. = Not Determined/Measured, NA = Not Applicable
²Ninth character of Laboratory Sample I.D. (on chain of custody form) and bottle number in collection series (e.g. bottle "A-2" is sample bottle number 2 from "A" collection). Together with project ID below constitutes entire sample bottle ID.

"C-Clear, O-Opaque, T-Turbid, S-Solids (Si-Slight, M-Moderate, H-Heavy), Y-Yellow, B-Brown, Bl-Black, G-Green

Total residual chlorine measured after sample prep only if present in initial sample characterization

Peer Rev by CB / PB Date 9/2/109

PROJECT I.D.



0400 Enterprise Court, Gloucester, VA 2300 r PH: 804-694-8285, FAX: 804-695-1129 www.coastalbio.com

SAMPLE INFORMATION/CHAIN-OF-CUSTODY (FORM ETF2011E Rev. 4/16/09)

Lab Sample ID (Lab Use Only)	Om	E G C	19	03	-[A]	*	
(22200000000000000000000000000000000000	A . A .	A A Y		, <u>N</u>	Spi		
FACILITY INFOR	RMATION		76 Career 16				
	nega Pro	tein	& PHON	# Ted		453-4211	
NPIDES PERMIT NO	9000 38	67.			OUTFALL # OR LOCATION		
SAMPLE CHLORINATED?		RINATED?			NT UPON ARRIVAL A CHLORINATION OF		
	PECIES OR PA METH #		m.b	ah A	ACUTE []	CHRONIC D	
	PECIES OR PA METH #		0.10	ienax	& ACUTE []	CHRONIC	
OTHER TESTS:					9:		
		,					
A SPECIFIC DILUTION S	SERIES MAY BE REQUIRE	D IN THE PERMIT. A	DEFAULT SERIES	OF 100, 50, 2	5, 12.5 AND 6.3%, OR CO	NCENTRATIONS USED IN	
PRIOR TESTING, WILL E	BE USED UNLESS INDICA	ED OTHERWISE. IF	N DOUBLPLEAS	EATTACHA	COPY OF APPLICABLE	PERMIT PAGES.	
GRAB SAMPLE I	NFORMATION	SAMPLE TIME			SAMPLE VOLUME		
SAMPLE DATE		GAMILLE TIME					
COMPOSITE SAI	PLE INFORMATION	ON					
SAMPLE START	169 07:00	SAMPLE EN		09 0	7:00 AUTOSAI		
TIME OR FLOW	NUMBER	96	VOL (ml)	(10	TIME		
PROPORTIONAL COMPOSITE	SUBSAMPLES_ SET VOLUME	10	SUBSAMPLES SET VOL		O INCREME	OTAL OTAL	
INFORMATION	SUBSAMPLE	N EL ON JOON OCCU		75,500		TION ON SEPARATE SHEET	
		N FLOW (COMPOSITI	NG BI NAND JA	I IAON SAMEL	E AND PLOY IN POOR	·	
FIELD MEASURE DISCHARGE	DISCHARGE	SAMPLE	SAMPLE		PATE/TIME	INITIALS	
TEMP (°C)	pH (S.U.)	TEMP (°C)	TRC (mg/l)	(e.g.	02/23/00 1835) 5 9/15/09	The state of the s	
21.7	BE TAKEN WITHIN 15 MI	7.0	DIAST CUSCAM	DIE COLLECT		1113	
	BE TAKEN WITHIN 15 MI	NOTES OF SAMPLE O		TEC COLLEGI	ion.		
COMMENTS:			_		C /41	1	
Ted Schult:	TECHNICAL	Supervis	sor	rel	dolla	9/15/0	9.
(PRINTED NAME	AFFILIATION SA	/PLER/ANALYS	T)	(SI	GNATURES	(DATE)	
REUNG	UISHEDIBYA	SVM IST HOATES	TAKE TIME	VC ALEXA	RECEIVE	DBX 70001	
0 011	TALL CONTRACTOR	dx 15-/001	10:15	STALL BUTTER	Blusin	Gringen Kalastonesia s. R	
JA Adl		1/13/114	10.7.5		90210		*
SHIPPING METH	DD: UPS FE	DEX HAI	D DELIVER	<u>Y</u> 0	THER	·	
	RRIVAL: ACCEPT	ABLE_OTH	ER				
SAMPLE ARRIVA	L TEMP: (°C) 3	ARRIVED	ON ICE? Y				
NOTE: It is the respo is 36 h. Additional co	nsibility of the sample sts may be incurred by	to insure that sam improper preserv	pies are prope ation, shipping	rly collected or receipt of	, preserved (>0-6° C f samples after 3 p.m	and shipped. Sample ho , or on weekends and holi	ld time ldays.



b4cc _ , .s.p. Court, Gloucester, VA 23051 PH: 804-694-8285, FAX: 804-695-1129 www.coastalbio.com

SAMPLE INFORMATION/CHAIN-OF-CUSTODY (FORM ETF2011E Rev. 4/15/09)

Lab Sample II		m. E.a	0 9 6	13	- B	
(Lab Use Only)	A	A . A A Project II	YYN		- A	
EAGU IDONE	DUATION		*5.	<u>*</u>	Seeding 19.52	
CLIENT/FACILITY	DRMATION	5	CONTAC		e1 1+	1157-11711
NAME (mean 1	rotein	& PHONE	# 169	Schultz	453-42-11
PERMIT NO	VAOD	Ø 3P6 7	LIE QUI A		OR LOCATION	001
SAMPLE CHLORINATED?	NO DEC	MPLE CHLORINATED? NO			NT UPON ARRIVAL A CHLORINATION OF S	
TESTS	SPECIES OR EPA METH #		m.L	ahia	ACUTE [CHRONIC E
REQUESTED:	SPECIES OR EPA METH #		1224	·iegall	ACUTE []	CHRONIC-E
OTHER TESTS:		X - X - X - X		regu zo		
1-		_				
A SPECIFIC DILUTIO	N SERIES MAY BE REC	DUIRED IN THE PERMIT. A	DEFAULT SERIES	OF 100, 50, 25	, 12.5 AND 5.3%, OR CO	NCENTRATIONS USED IN
PRIOR TESTING, WIL	L BE USED UNLESS IN	DICATED OTHERWISE.	IN DOUBT PLEAS	E ATTACH A C	COPY OF APPLICABLE P	ERMIT PAGES,
GRAB SAMPLE SAMPLE DATE	INFORMATION	SAMPLE TIME			SAMPLE VOLUME	
SAMPLE DATE		SAWIFEE (IIVIE			GAMILE VOLUME	
COMPOSITE S	AMPLE INFORM	IATION				*
SAMPLE START		14/5 SAMPLE E		09 0	7:15 AUTOSAN	
TIME OR FLOW	NUMBER SUBSAMPL	96	VOL (ml) SUBSAMPLES	1 200	TIME	16-
PROPORTIONAL COMPOSITE	SET VOLUM	Æ.	SET VOLU	IME .	. // TO	TAL
INFORMATION	SUBSAMPL IMF SUBSAMPLES BAS	ESED ON FLOW (COMPOSIT	FLOW	TACH SAMPL		
FIELD MEASUR						
DISCHARGE TEMP (°C)	DISCHARGE pH (S.U.)	SAMPLE TEMP (°C)	SAMPLE TRC (mg/l)	_	ATE/TIME 02/23/00 1835)	INITIALS
73.4	7.06			9/17	109 08:00	VAS
	IST BE TAKEN WITHIN	15 MINUTES OF SAMPLE	OR LAST SUBSAME	LE COLLECTI	ON.	
COMMENTS:			(8)			11
~ · · / C	1 14 -	- 1 1	< 1	[-051	a later
led oc.	LUIIZ /	SAMPLER/ANALY	STY	S67 V	GNATURE)	(DATE)
(PRINTED NA	MEAFFILIATION	SAMPLEMANALI		(0)		
REL	NQUISHED:BX	DATE			RECEIVE	2183
VK Hod	01	9/17/0	9 10:4	5	Mus	
7		19/19/0	9			
SHIPPING MET	HOD: UPS	FEDEXHA	ND DELIVER	YO	THER	
	ARRIVAL: ACC					
SAMPLE ARRIV	'AL TEMP: (°C)_	2_ARRIVE	D ON ICE? YE	ES N	10	2 8 82 8
NOTE: It is the responsible 36 h. Additional	consibility of the sai	mpler to insure that sa ed by improper preser	mples are proper vation, shipping	ly collected, or receipt of	preserved (>0-6° C) samples after 3 p.m.	and shipped, Sample hold tim or on weekends and holidays.



6400 Enterprise Court, Gloucester, VA 23061 PH: 804-694-8285, FAX: 804-695-1129 www.coastalbio.com

SAMPLE INFORMATION/CHAIN-OF-CUSTODY (FORM ETF2011E Rev. 4/15/09)

				*			
Lab Sample ID (Lab Use Only)	D N	A LA	D P C	3	C Spi	4 4	(a) (b)
FACILITY INFOR	MATION					777.57	
CLIENT/FACILITY		POTEIN	& PHON	# Ted	Schult.	2 453-	4211
PERMIT NO	ADDD	3867		OF	TFALL # LOCATION	001	
SAMPLE CHLORINATED?	1	PLE HLORINATED?			IPON ARRIVAL A ORINATION OF S		
TESTS E	PECIES OR PAMETH#		m.ba	hia	ACUTE 4	CHRONIE	_
E	PECIES OR PA METH #		(.var	ilantur	ACUTE 1	CHRONIC Z	_
OTHER TESTS: A SPECFIC DILUTION S	EDIEC MAY BE DEOL	IIDED IN THE DEGRAM	A DESAULT SERIES	OE 100 50 25 12	SAND 8 3% OP COL	NCENTRATIONS LISED I	N
PRIOR TESTING, WILL B	E USED UNLESS IND	ICATED OTHERWISE	IF IN DOUBY PLEAS	E ATTACH A COPY	OF APPLICABLE P	ERMIT PAGES.	
SAMPLE DATE	NOTIMINOT	SAMPLE TIM	E	SAI	MPLE VOLUME		7
COMPOSITE SAN	IPI E INFORMA	ATION					!
SAMPLE START 9	2/09 07	15 DATE &		9 0715	AUTOSAM TEMP. (°C		7
TIME ORFLOW PROPORTIONAL	NUMBER SUBSAMPLE	s 96	VOL (ml) SUBSAMPLES	ar C. I	INCREMEN	it 15 m	4
PROPORTIONAL COMPOSITE INFORMATION	SUBSAMPLE SET VOLUMI SUBSAMPLE	E	SUBSAMPLES SET VOLU FLOW_/	JME 99/d	INCREMENTO	TAL LUME	
PROPORTIONAL COMPOSITE INFORMATION FOR VARIABLE VOLUME	SUBSAMPLE SET VOLUMI SUBSAMPLE SUBSAMPLES BASE	E	SUBSAMPLES SET VOLU FLOW_/	JME 99/d	INCREMENTO	TAL LUME	
PROPORTIONAL COMPOSITE INFORMATION FOR VARIABLE VOLUME FIELD MEASURE	SUBSAMPLE SET VOLUMI SUBSAMPLE SUBSAMPLES BASE MENTS	ED ON FLOW (COMPO	SUBSAMPLES SET VOLU FLOW SITING 'BY HAND') A	JME 99/ 75,500/d	INCREMENTO	TAL LUME	
PROPORTIONAL COMPOSITE INFORMATION FOR VARIABLE VOLUME FIELD MEASURE DISCHARGE TEMP (°C)	SUBSAMPLE SET VOLUMI SUBSAMPLE SUBSAMPLES BASE MENTS DISCHARGE pH (S.U.)	SAMPLE TEMP (°C)	SUBSAMPLES SET VOLU FLOW_/	TACH SAMPLE AN	INCREMENTO VOD FLOW INFORMAT /TIME 8/00 1835)	TAL LUME_ ION ON SEPARATE SHE	
PROPORTIONAL COMPOSITE INFORMATION FOR VARIABLE VOLUME FIELD MEASURE DISCHARGE TEMP (°C) 33.	SUBSAMPLE SET VOLUMI SUBSAMPLE SUBSAMPLES BASE MENTS DISCHARGE pH (S.U.)	SAMPLE TEMP (°C)	SUBSAMPLES SET VOLU FLOW_ DSITING 'BY HAND') A' SAMPLE TRC (mg/l)	75,500/d 75,500/d TTACH SAMPLE AN DATE (e.g. 02/2:	INCREMENTO TO VO D FLOW INFORMAT	TAL LUME_ ION ON SEPARATE SHE	
PROPORTIONAL COMPOSITE INFORMATION FOR VARIABLE VOLUME FIELD MEASURE DISCHARGE TEMP (°C)	SUBSAMPLE SET VOLUMI SUBSAMPLE SUBSAMPLES BASE MENTS DISCHARGE pH (S.U.)	SAMPLE TEMP (°C)	SUBSAMPLES SET VOLU FLOW_ DSITING 'BY HAND') A' SAMPLE TRC (mg/l)	75,500/d 75,500/d TTACH SAMPLE AN DATE (e.g. 02/2:	INCREMENTO VOD FLOW INFORMAT /TIME 8/00 1835)	TAL LUME_ ION ON SEPARATE SHE	
PROPORTIONAL COMPOSITE INFORMATION FOR VARIABLE VOLUME FIELD MEASURE DISCHARGE TEMP (°C) 3 3 J MEASUREMENTS MUST	SUBSAMPLE SET VOLUMI SUBSAMPLE SUBSAMPLES BASE MENTS DISCHARGE pH (S.U.)	SAMPLE TEMP (°C)	SUBSAMPLES SET VOLU FLOW_ DSITING 'BY HAND') A' SAMPLE TRC (mg/l)	75,500/d 75,500/d TTACH SAMPLE AN DATE (e.g. 02/2:	INCREMENTO VOD FLOW INFORMAT /TIME 8/00 1835)	TAL LUME_ ION ON SEPARATE SHE	
PROPORTIONAL COMPOSITE INFORMATION FOR VARIABLE VOLUME FIELD MEASURE DISCHARGE TEMP (°C) 3 3 J MEASUREMENTS MUST	SUBSAMPLE SET VOLUMI SUBSAMPLES SUBSAMPLES BASE MENTS DISCHARGE pH (S.U.) 7. 2 BE TAKEN WITHIN 1	SAMPLE TEMP (°C) 3 · P	SUBSAMPLES SET VOLU FLOW / DSITING 'BY HAND') A SAMPLE TRC (mg/l) LE OR LAST SUBSAM	TACH SAMPLE AN DATE (e.g. 02/2: 9/18/29 PLE COLLECTION.	INCREMENTO VO D FLOW INFORMAT /TIME B/00 1835) (730	TAL LUME_ ION ON SEPARATE SHE INITIALS (DATE)	
PROPORTIONAL COMPOSITE INFORMATION FOR VARIABLE VOLUME FIELD MEASURE DISCHARGE TEMP (°C) 3 3 J MEASUREMENTS MUST COMMENTS:	SUBSAMPLE SET VOLUMI SUBSAMPLES SUBSAMPLES BASE MENTS DISCHARGE pH (S.U.) 7. 2 BE TAKEN WITHIN 1	SAMPLE TEMP (°C) 3 · P	SUBSAMPLES SET VOLU FLOW	TACH SAMPLE AN DATE (e.g. 02/2: 9/18/79 PLE COLLECTION.	INCREMENTO VO D FLOW INFORMAT /TIME 8/00 1835) 0730	TAL LUME_ ION ON SEPARATE SHE INITIALS (DATE)	
PROPORTIONAL COMPOSITE INFORMATION FOR VARIABLE VOLUME FIELD MEASURE DISCHARGE TEMP (°C) 3 3 J MEASUREMENTS MUST COMMENTS:	SUBSAMPLE SET VOLUMI SUBSAMPLE SUBSAMPLES BASE MENTS DISCHARGE pH (S.U.) 7. 2 BETAKEN WITHIN 1	SAMPLE TEMP (°C) 3 · P	SUBSAMPLES SET VOLU FLOW / DSITING 'BY HAND') A SAMPLE TRC (mg/l) LE OR LAST SUBSAM	TACH SAMPLE AN DATE (e.g. 02/2: 9/18/79 PLE COLLECTION.	INCREMENTO VO D FLOW INFORMAT /TIME B/00 1835) (730	TAL LUME_ ION ON SEPARATE SHE INITIALS (DATE)	
PROPORTIONAL COMPOSITE INFORMATION FOR VARIABLE VOLUME FIELD MEASURE DISCHARGE TEMP (°C) 3 3 J MEASUREMENTS MUST COMMENTS:	SUBSAMPLE SET VOLUMI SUBSAMPLE SUBSAMPLES BASE MENTS DISCHARGE pH (S.U.) 7. 2 BETAKEN WITHIN 1	SAMPLE TEMP (°C) 3 · P	SUBSAMPLES SET VOLU FLOW	TACH SAMPLE AN DATE (e.g. 02/2: 9/18/79 PLE COLLECTION.	INCREMENTO VO D FLOW INFORMAT /TIME B/00 1835) (730	TAL LUME_ ION ON SEPARATE SHE INITIALS (DATE)	
PROPORTIONAL COMPOSITE INFORMATION FOR VARIABLE VOLUME FIELD MEASURE DISCHARGE TEMP (°C) 3 3 J MEASUREMENTS MUST COMMENTS: (PRINTED NAME SHIPPING METHO	SUBSAMPLE SET VOLUMI SUBSAMPLE SUBSAMPLES BASE MENTS DISCHARGE PH (S.U.) 7. 2 BETAKEN WITHIN 1	SAMPLE TEMP (°C) 3 · P 5 MINUTES OF SAMP	SUBSAMPLES SET VOLU FLOW _/ PSITING 'BY HAND') A SAMPLE TRC (mg/l) LE OR LAST SUBSAM LYST) HAND DELIVER	TACH SAMPLE AN TRACH SAMPLE AN DATE (e.g. 02/2: 9/10/19 PLE COLLECTION. (SIGNA)	INCREMENTO VO D FLOW INFORMAT TIME B/00 1835) O 7 3 0 ATURE)	TAL LUME_ ION ON SEPARATE SHE INITIALS (DATE)	
PROPORTIONAL COMPOSITE INFORMATION FOR VARIABLE VOLUME FIELD MEASURE DISCHARGE TEMP (°C) 3 3 J MEASUREMENTS MUST COMMENTS: (PRINTED NAME SHIPPING METHO CONDITION ON A	SUBSAMPLE SET VOLUMI SUBSAMPLE SUBSAMPLES BASE MENTS DISCHARGE PH (S.U.) 7. 2 BETAKEN WITHIN 1	SAMPLE TEMP (°C) 3 · P 5 MINUTES OF SAMP SAMPLER/ANAI FEDEX PTABLE X C	SUBSAMPLES SET VOLU FLOW _/ DITING 'BY HAND') A SAMPLE TRC (mg/l) LE OR LAST SUBSAM LYST) HAND DELIVER OTHER	TACH SAMPLE AN TRACH SAMPLE AN C. DATE (e.g. 02/2: 9/18/99 PLE COLLECTION. (SIGN.)	INCREMENTO VO D FLOW INFORMAT OTIME B/00 1835) O 7 3 0 ATURE)	TAL LUME_ ION ON SEPARATE SHE INITIALS (DATE)	
PROPORTIONAL COMPOSITE INFORMATION FOR VARIABLE VOLUME FIELD MEASURE DISCHARGE TEMP (°C) 3 3 J MEASUREMENTS MUST COMMENTS: (PRINTED NAME SHIPPING METHO	SUBSAMPLE SET VOLUMI SUBSAMPLE SUBSAMPLES BASE MENTS DISCHARGE PH (S.U.) 7. 2 BE TAKEN WITHIN 1. WAFFILIATION S UISHED BY DD: UPS_ RRIVAL: ACCE L TEMP: (°C)_	SAMPLE TEMP (°C) 3 · P 5 MINUTES OF SAMP SAMPLER/ANAI FEDEX PTABLE X C 5 ARRIV	SUBSAMPLES SET VOLU FLOW / DSITING 'BY HAND') A SAMPLE TRC (mg/l) LE OR LAST SUBSAM LYST) HAND DELIVER OTHER /ED ON !CE? Y	TACH SAMPLE AN (e.g. 02/22 9/10/09 PLE COLLECTION. (SIGNA P. Quen Y K OTHI	INCREMENTO VO D FLOW INFORMAT ITIME B/00 1835) O 7 3 0 ATURE) REGEIVER	TAL LUME ION ON SEPARATE SHE INITIALS (DATE)	THE TOTAL PROPERTY OF THE PROP

Facility Name: Omega Protein Address: Reedville, VA.
VPDES Permit No.: VA0003867 Report Period: From 11/1/09To 11/8/09
Paint Area COMPLIANCE / NONCOMPLIANCE * (check as appropriate)
*Comments on Noncompliance
Theodore Schultz / Technical Supervisor Name of Principal Exec. Officer or Authorized Agent / Title
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See 18 U.S.C. paragraph 1001 and 33 U.S.C. paragraph 1319. (Penalties under these statutes may include fines up to \$10,000 and or maximum imprisonment of between 6 months and 5 years).

Facility Name: Omega Protein Address: Reedville, VA.	
VPDES Permit No.: VA0003867	
Report Period: From 11/9/03 To 11/15/09	•
Paint Area COMPLIANCE / NONCOMPLIANCE * (check as appropriate)	
*Comments on Noncompliance	
Theodore Schultz / Technical Supervisor Name of Principal Exec. Officer or Authorized Agent / Title	
I certify under penalty of law that this document and all attachments were prepared under my direction supervision in accordance with a system designed to assure that qualified personnel properly gather a evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is to the best my knowledge and belief true, accurate and complete. I am aware that there are significant penalties submitting false information, including the possibility of fine and imprisonment for knowing violations. See U.S.C. paragraph 1001 and 33 U.S.C. paragraph 1319. (Penalties under these statutes may include fines to \$10,000 and or maximum imprisonment of between 6 months and 5 years). Signature of Principal Officer or Authorized Agent / Date	em t of for 18

Facility Name: Omega Protein Address: Reedville, VA.
VPDES Permit No.: VA0003867
Report Period: From 11/16/01 To 11/22/09
Paint Area COMPLIANCE / NONCOMPLIANCE * (check as appropriate)
*Comments on Noncompliance
Theodore Schultz /Technical Supervisor Name of Principal Exec. Officer or Authorized Agent / Title
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See 18 U.S.C. paragraph 1001 and 33 U.S.C. paragraph 1319. (Penalties under these statutes may include fines up to \$10,000 and or maximum imprisonment of between 6 months and 5 years). Signature of Principal Officer or Authorized Agent / Date

Facility Name: Omega Address: Reedville, V	ι Protein Α.			
VPDES Permit No.:	VA0003867			
Report Period: From	11/2309 TO 11/3	0109		
Paint Area	COI	MPLIANCE / NOI (check as appr	NCOMPLIANCE * opriate)	w
<u> </u>				
				w
*Comments on Nonc				
Name of Principal Ex	cec. Officer or Authori	zed Agent / Title		
I certify under penalt supervision in accord evaluate the informat or those persons dire my knowledge and b submitting false infor	y of law that this docu dance with a system of tion submitted. Based actly responsible for ga pelief true, accurate an	iment and all attach designed to assure I on my inquiry of th othering the informated accomplete. I am possibility of fine an	e person or persons tion, the information aware that there are dimprisonment for latities under these states.	red under my direction of onnel properly gather ar is who manage the system is submitted is to the best are significant penalties for chowing violations. See a tatutes may include fines to

Signature of Principal Officer or Authorized Agent / Date

Client: Omega Protein Project ID: OMEG0905 Client Sample ID: Outfall 002 Permit No: VA0003867 Sample Period: 11/10/09



Report of Analysis: Whole Effluent Toxicity (WET)

Submitted To:
Mr. Ted Schultz
Regulatory Compliance Officer
Omega Protein
P.O. Box 175
Reedville, VA 22539

Prepared By:
Coastal Bioanalysts, Inc.
6400 Enterprise Court
Gloucester, VA 23061
(804) 694-8285
www.coastalbio.com
Contact: Peter F. De Lisle, Technical Director

Acute Test Results	Water Control			
Species-Test Method	48-h LC50	95% C.L.	T.U.Ac	NOAEC
M. bahia EPA 2007.0	>100	N/A	<1.00	N/A

Note: Details regarding test conduct and data analysis provided in attached bench sheets and printouts as applicable. Although the name of *Mysidopsis bahia* has officially been changed to *Americamysis bahia*, the former name is referenced because of its use in the EPA method manuals and most NPDES permits.

Acute Test Biological Sum	mary Data			Sample	Concentra	tion (%)	
Species-Method	Endpoint	Control	6.25	12.5	25.0	50.0	100
M. bahia EPA 2007.0	Survival (%):	100	100	100	100	100	75

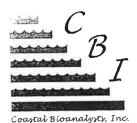
Test Information Species-Method	Start Date/Time End Date/Time	Organism Source	Hatch/Harvest Date/Time	Acclimation Temp.	Acclimation Water	Test Aerated?
M. bahia	11/10/09 1615	CBI	11/4/09 1030		HWM ASW	
EPA 2007.0	11/12/09 1600	Stock	11/5/09 1030	25° C	20 g/kg sal.	No

Sample/Dilution Water Data	Acute	Test
		Dilution
Water Quality Parameter (Units)	Sample	Water
Arrival Temperature (°C)	1	N/A
Use Temperature (°C)	25	25
Arrival Salinity (g/kg)	<1	N/A
Use Salinity (g/kg)	20	20
pH (S.U.)	7.01	7.78
Dissolved Oxygen (mg/l)	7.0	7.3
Total Hardness (mg/l as CaCO ₃)	50	N/A
Alkalinity (mg/l as CaCO ₃)	276	N/A
Total Residual Chlorine (mg/l)	<q.l.< td=""><td>N/A</td></q.l.<>	N/A
Ammonia (mg/l NH ₃ -N)	34.2	N/A

Dilution water = Hawaiian Marine Mix ASW made with deionized water

Sample Aging/Use	/Pretreatment	4900	William Lane 1	
CBI Sample I.D.	Collection Date/Time	Date(s)/Time(s) 1 st Used in Tests	Date(s)/Time(s) Used in Renewals	Sample Adjustments
OMEG0905-A	11/10/09 0800	11/10/09 1615	N/A	Salt added

Client: Omega Protein Project ID: OMEG0905 Client Sample ID: Outfall 002 Permit No: VA0003867 Sample Period: 11/10/09



Test:			M. bahi	a 2007.0		
% Conc:	Cont.	6.25	12.5	25.0	50.0	100
Temp.	25	25	25	25	25	25
(°C)	0	0	0	0	0	0
D.O.	6.0	6.0	5.9	5.8	5.7	5.6
(mg/l)	1.2	1.2	1.3	1.4	1.5	1.6
pН	7.62	7.66	7.62	7.64	7.74	7.65
(S.U.)	0.23	0.19	0.15	0.05	0.21	0.56

Acute Test QA/QC	Reference Tox	icant: KCl Unit	s: mg/l Test O	rganism Source: CBI	Stock Cultures
Species-Method (Ref. Test Date)	Data Source	% Control Survival	48-h LC50	95% C.L./A.L. for LC50	RTT in Control?
M. bahia 2007.0	RTT	100	544	490-700	Yes
(10/26/09-10/28/09)	CC	100	595	511-679	

Note: RTT = Reference Toxicant Test, CC = Control Chart

The results of analysis contained within this report relate only to the sample as received in the laboratory. This report shall not be reproduced except in full without written approval from the laboratory.

APPROVED:

Peter F. De Liste, Ph.D.

Technical Director

11/23/07

Date

GLOSSARY OF TERMS AND ABBREVIATIONS

A.L. (Acceptance Limits): The results of a given reference toxicant test are compared to the control chart mean value ± 2 standard deviations. These limits approximate the 95% probability limits for the "true" reference toxicant value.

C.L. (Confidence Limits): These are the probability limits, based on the data set and statistical model employed, that the "true value" lies within the limits specified. Typically limits are based on 95% or 99% probabilities.

Control chart: A cumulative summary chart of results from QC tests with reference toxicants. The results of a given reference toxicant test are compared to the control chart mean value and 95% Acceptance Limits (A.L.) (mean ± 2 standard deviations).

LC50: The concentration of sample or chemical, calculated from the data set using statistical models, causing a 50% reduction in test organism survival. The lower the LC50, the more toxic the chemical or sample. Units are same as test concentration units. Note: The LC50 value must always be associated with the duration of exposure. Thus 48-h LC50, 96-h LC50, etc. are calculated.

N/A: Not applicable. N/D: Not determined or measured.

NOAEC: No-observable-acute-effect-concentration. The highest concentration of sample or chemical in an acute test dilution series in which the test organisms exhibit no statistically significant reduction in the test end point (e.g. survival) compared to control organisms. Units are same as test concentration units.

Q.L.: Quantitation Limit. Level, concentration, or quantity of a target variable (analyte) that can be reported at a specified degree of confidence.

T.U.: Toxic units. Expresses the relative toxicity of an effluent in such a manner that the larger the toxic unit value the more toxic the effluent. T.U., $_{Ac} = 100/LC50$. T.U., $_{C0\pi} = 100/NOEC$. A dimensionless unit.

% Effluent	I.D.	Day 0 Live	Day 1 Live	Day 2 Live	Final % Survival
Lab	C-A	10	2	10	
Control	C-B	(a)	l D	175	110
	1-A	15	10	10	
6.25	1-B	10	10	A t	100
1215	2-A	(p)	10	1-73	
1003	2-B	10	10	1.7:	601
25.u	3-A	10	10	16	
ν ₃ . υ	3-B	10	0.1	17	100
50.0	4-A	10	10	1 ()	
70,0	4-B	(0	13	10	100
170	5-A	10	122	7)	
1 10	5-B	10	10	S	75
	itials:	PD	49	23	
Count	Time:	1615	0855	1000	*Test End Time

Parameter	Treatment I.D.	Day 0	Day 1	Day 2
	С	25	75	25
Temp.	1	25	25	75
(°C)	2	25	>S	75
	3	25	28	25
×:	4	25	25	75
	5	15	25	25
	С	7.86	7.01	7.40
pН	1	283	7.68	7.46
(S.U.)	2	7.78	7.61	7.48
	3	769	7-64	7.59
	4	7.51	7.50	7.91
	5	17,01	7.90	5.03
	С	7.3	5.6	Se
D.O.	1	7.3	5.6	5.0
(mg/l)	2	23	5.5	4.8
	3	7.3	5.5	4.6
	4	7.3	5.5	4.4
	5	1 7.3	S.y	4.2
	С	20		70
Salinity	1	表现主		
(g/kg)	2	Transaction of the second		
	3	Section 2	(100 kg 200	
	4	-20.15		A FAMILY
	5	20		Pt
Replicate Me	easured:	A	B	. A
lı	nitials:	fis:	P5 "	Po
TRC (mg	/l) in highest o	conc. at end o	of test:	NA

Species: Mysidopsis (Americamysis) bania
Source: CBI stock cultures
Other:
Harvest: Date/time start: 11/4/24 /232
Date /time end:
Acclimation: Water: ASW 20 g/kg salinity 💟
Other
Temperature (°C):2{\frac{7}{3}}
Feeding: Prior to test: Artemia ad libitum During test: Artemia nauplii ca. 100 /mysid/day
Illumination: 16L:8D 10-20 uE/m²/s
Test chamber size:400 ml250 ml
Solution volume:200 mlml
Number of replicates/treatment: 2
Initial number of mysids/replicate: 10
Set up: Date (Day 0): 「い/ト/とら
Time water added: /550
Time mysids added: 1615
Set up by (initials):/_
NOTES:

	IN.	ITIAL SAN	MPLE CHAP	RACTERIZ	ATION ¹		
Sample Bottle ²	A-1				NOTES	:	
Tot. Res. Chlorine (mg/l)	Lal			(A)]		
Ḥardness (mg/l CaCO₃)	5-()						
Alkalinity (mg/l CaCO ₃)	224						*/
NH ₃ -N (mg/l)	34.2						
Color/Appearance ³	C						
Obvious Odor?	90						
Date/Time	11/10 1120						
Initials	bin						
SAM	MPLE PREF	ARATION	MEASURE	MENTS (1	00% concentration)		
. Sample Bottle ²	1-4						
Prep Temperature (°C)	25						
Initial Salinity (g/kg)	4						
Adjusted Salinity (g/kg)	20						
DO (mg/l) After Warm/Sal	7.0						
Aeration Time (min)	_	t					
Adjusted D.O.							
Final pH (S.U.)	7,01						
Tot, Res. Chlorine (mg/l)4	ND.					18.	
Sample Filtered (60 um)?	N-3						
Date/Time	11/12 1537						
Initials	fD						
	D	ILUTION V	VATER CHA	RACTERI	STICS		
Vat Number/Letter	C						
Temperature (°C)	25						
Salinity (g/kg)	20						
D.O. (mg/l)	7.3						
pH (S.U.)	7.7.8						
Date/Time	110 1530						
Initials	PP	G I					

Q.L. = Quantification Limit, N.D. = Not Determined/Measured, NA = Not Applicable

Peer Rev by all Date 1112414

PROJECT LD.

(First 8 characters of Laboratory Sample ID)

²Ninth character of Laboratory Sample I.D. (on chain of custody form) <u>and</u> bottle number in collection series (e.g. bottle "A-2" is sample bottle number 2 from "A" collection). Together with project ID below constitutes entire sample bottle ID. ³C-Clear, O-Opaque, T-Turbid, S-Solids (SI-Slight, M-Moderate, H-Heavy), Y-Yellow, B-Brown, BI-Black, G-Green ⁴Total residual chlorine measured after sample prep only if present in initial sample characterization



Lab Sample ID (Lab Use Only)

6400 Enterprise Court, Gloucester, VA 23061 PH: 804-694-8285, FAX: 804-695-1129 www.coastalbio.com

SAMPLE INFORMATION/CHAIN-OF-CUSTODY (FORM ETF2011D Rev. 10/10/07)

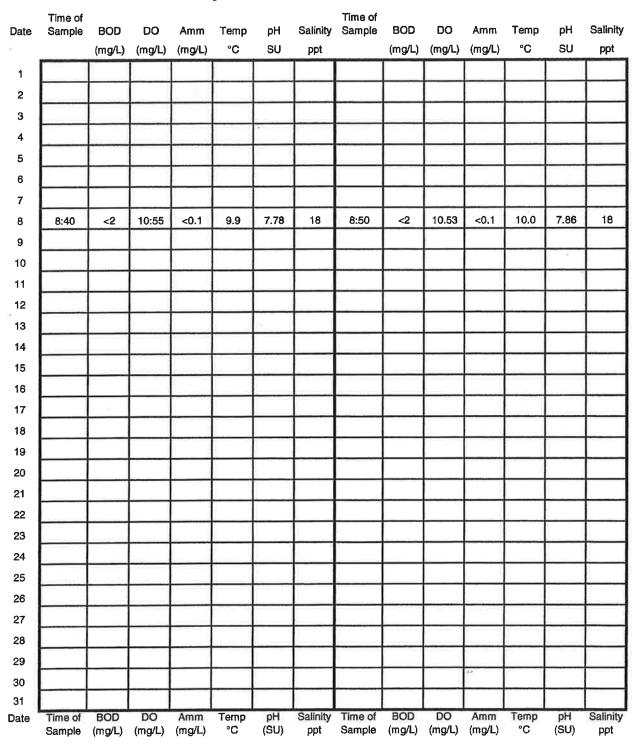
	ORMATION	_	CONTACT				
CLIENT/FACILITY NAME (Omean	PROTEIN		# Ted	Schultz	804-45	3-47
NPDES PERMIT NO	VADOO	3860			OUTFALL # OR LOCATION	00	2
SAMPLE CHLORINATED?		PLE ILORINATED? //a			IT UPON ARRIVA HLORINATION C		
TESTS	SPECIES OR EPA METH#	M. bahia	L A	007.0	ACUTE [CHRO	AIC 🗆
REQUESTED:	SPECIES OR EPA METH#				ACUTE [CHRO	νic 🗆
OTHER TESTS:	, ====================================						
A SPECIFIC DILUTI	ON SERIES MAY BE REQ	UIRED IN THE PERMIT. A DICATED OTHERWISE. IF I	DEFAULT SERIES	OF 100, 50, 2	5, 12.5 AND 6.3%, C	OR CONCENTRATION	ONS USED IN
SAMPLE DATE	E INFORMATION	SAMPLE TIME			SAMPLE VOLUM	1E	
	SAMPLE INFORM	ATION					
COMPOSITE STA DATE & TIME	11/9/09 02	900	DATE & T	ITE END IME	1/10/09	0 200	
TIME OR FLOW PROPORTIONAL	NUMBER SUBSAMPLI		VOL (ml) SUBSAMPLES		TIME	ENT	
COMPOSITE INFORMATION	SET VOLUM		SET VOLU	ME 1/10	000 sal	TOTAL VOLUME	690
	SUBSAMPLI LUME SUBSAMPLES BAS	SED ON FLOW (COMPOSITI			7		ARATE SHEET
FIELD MEASU	JREMENTS						
DISCHARGE TEMP (°C)	DISCHARGE pH (S.U.)	SAMPLE TEMP (°C)	SAMPLE TRC (mg/l)		02/23/00 1835)	INIT	IALS
15.2	6.49	2°C		11/10	109	07	C.
MEASUREMENTS I	MUST BE TAKEN WITHIN	15 MINUTES OF SAMPLE C	R LAST SUBSAN	PLE COLLEC	TION.		
COMMENTS:						, ,	
					"		
	- 1 11	1-10		TIL	· ·	7/1/	1 . Smile
Theodor	e Schultz	Tech Supe		T/A	colore (Schiff	/1/10/6
Theodor (PRINTED N	AME/AFFILIATION	SAMPLER/ANALYS	ST)		IGNATURE)	Schiff	/ 1 / / (DATE)
Theodor (PRINTED N	SCAUTTA AME/AFFILIATION ELINQUISHED BY	SAMPLER/ANALYS DATE	БТ) ПМЕ		REC	EIVED BY	/ 1/10/0 (DATE)
Theodor (PRINTED N	AME/AFFILIATION	SAMPLER/ANALYS	БТ) ПМЕ		REC	(1 [(DATE)
Theodor (PRINTED N	AME/AFFILIATION	SAMPLER/ANALYS DATE	БТ)		REC	(1 [(DATE)
Theodor (PRINTED NA	AME/AFFILIATION	SAMPLER/ANALYS DATE	7 10:4	5 Bu	rectiff on	(1 [(DATE)
Theodor (PRINTED NA	AME/AFFILIATION ELINQUISHED BY ETHOD: UPS	DATE ///o/ 09	TIME 7 /0:4	5 Bu	rectiff on	(1 [11/10/6 (DATE)
Theodor (PRINTED NA RE SHIPPING ME CONDITION O	ELINQUISHED BY ETHOD: UPS ON ARRIVAL: ACC	SAMPLER/ANALYS DATE ////o/09 FEDEX HA	TIME 7 10:4 ND DELIVER	5 Bu	RECEIPTON	(1 [(DATE)

is 36 h. Additional costs may be incurred by improper preservation, shipping or receipt of samples after 3 p.m. or on weekends and holidays.

Chesapeake Bay Water Quality Monitoring Data

Predischarge

After Discharge



Name of Vessel: Dempster

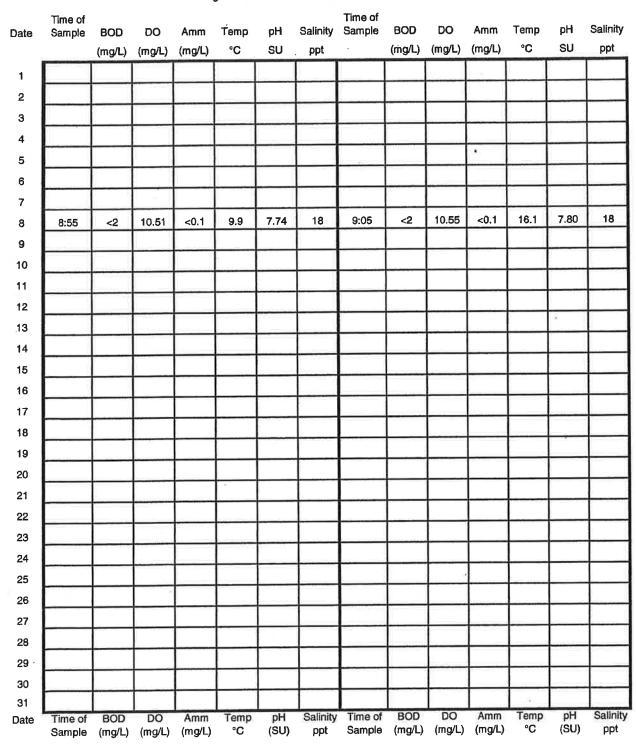
Name of Sampler: Ted Schultz

AttachmentHandler.ashx

Chesapeake Bay Water Quality Monitoring Data

Predischarge

After Discharge



Name of Vessel: Kimberly

Name of Sampler: Ted Schultz

From:

Ted Schultz [tschultz@OmegaProteinInc.com]

Sent:

Monday, December 28, 2009 9:03 AM

To:

Bishop, Patrick

Subject:

RE: Chesapeake Bay Samples for Nov

Attachments: CB Refrig Nov Sample (Dec) Tangier #2.xls; CB Refrig Nov Sample (Dec) Conrad #1.xls

Pat, here are the results of the set of samples actually collected at the first opportunity in December as substitutes for the ones we were not able to collect in November.

Ted Schultz

Omega Protein, Inc.
610 Menhaden Road
Reedville, VA 22539
Phone 804.453.4211 ext 120 | Fax 804.453.4123
Email tschultz@OmegaProteinInc.com | http://www.omegaproteininc.com

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From: Bishop, Patrick [mailto:Patrick.Bishop@deq.virginia.gov]

Sent: Tuesday, December 15, 2009 10:30 AM

To: Ted Schultz
Cc: Bill Purcell

Subject: RE: Chesapeake Bay Samples for Nov

Thx.

Patrick L. Bishop
Piedmont Regional Office
4949-A Cox Road
Glen Allen, VA 23060
Direct - (804) 527-5127
Fax - (804) 527-5106
Patrick.Bishop@deq.virginia.gov

Always remember that you're unique...Just like everybody else. - Zen proverb

From: Ted Schultz [mailto:tschultz@OmegaProteinInc.com]

Sent: Tuesday, December 15, 2009 10:07 AM

To: Bishop, Patrick **Cc:** Bill Purcell

Subject: Chesapeake Bay Samples for Nov

Patrick,

Just to elaborate on not pulling the Chesapeake Bay samples in November. We had one day early in the month when we could have gone out. As I recall, the day was not conducive to either my or the sampling boat pilot's schedules and it was early in the month so we didn't worry about running out of time. Unbeknownst to us, due to weather and fishing conditions for the rest of the month, it was not possible to get samples. As such, we sampled at our next opportunity (and only) 12/8/09 and sampled from 4 boats, using the first two for the November requirement and the second two for December.

Ted Schultz

Omega Protein, Inc.
610 Menhaden Road
Reedville, VA 22539
Phone 804.453.4211 ext 120 | Fax 804.453.4123
Email tschultz@OmegaProteinInc.com | http://www.omegaproteininc.com

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After Discharge

Chesapeake Bay Water Quality Monitoring Data

Predischarge

Time of Time of Salinity BOD DO Temp рΗ DO Temp ρН Salinity Sample Amm BOD Amm Date Sample °C SU ppt (mg/L) (mg/L) (mg/L) ٥С SU (mg/L) (mg/L) (mg/L) ppt 1 2 3 4 5 6 7 10.37 < 0.25 9.3 7.90 17 8:20 <2 10.48 <0.1 9.6 7.55 18 8 8:05 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 DO Salinity BOD pН Salinity Time of Amm Temp BOD DO Amm Temp pН Time of Date °C (SU) Sample (mg/L) (mg/L) (mg/L) ppt °C (SU) ppt Sample (mg/L) (mg/L) (mg/L)

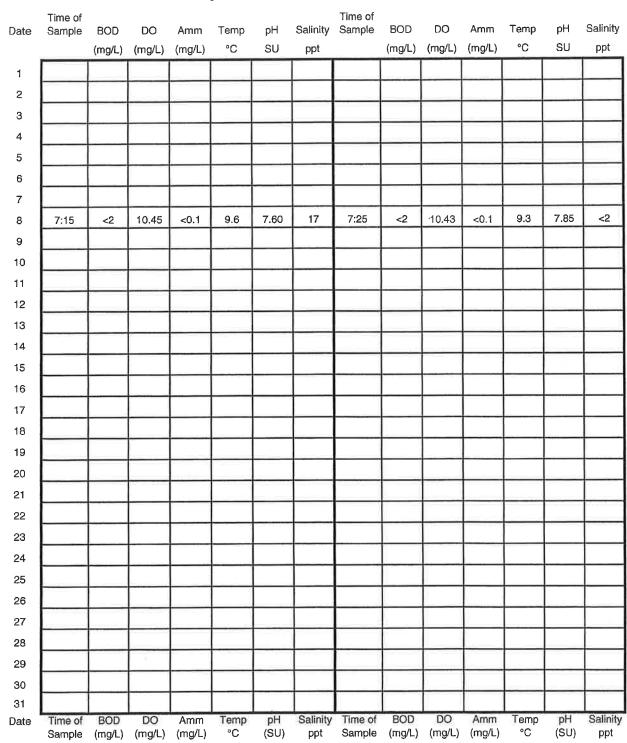
Name of Vessel: Tangier Is.

Name of Sampler: Ted Schultz

Chesapeake Bay Water Quality Monitoring Data

Predischarge

After Discharge



Name of Vessel: Conrad

Name of Sampler: Ted Schultz

Facility Name: Omega Protein

Address: Reedville, VA.	tt.	
VPDES Permit No.: VA0003867		9
Report Period: From 17 1/09 To 12/6	6109	
Paint Area COM	MPLIANCE / NONCOMPLIANCE * (check as appropriate)	
:		92
*Comments on Noncompliance		
Theodore Schultz / Technologies of Principal Exec. Officer or Authoriza	red Agent / Title	
supervision in accordance with a system de evaluate the information submitted. Based or those persons directly responsible for gather my knowledge and belief true, accurate and the information including the processing inc	1/5/2010	the system the best of enalties for ons. See 18

Facility Name: Omega Protein Address: Reedville, VA.
VPDES Permit No.: VA0003867
Report Period: From 177/09 To 12/13/09
Paint Area COMPLIANCE / NONCOMPLIANCE * (check as appropriate)
*Comments on Noncompliance
Theodore Schultz / Technical Supervisor Name of Principal Exec. Officer or Authorized Agent / Title
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See 18 U.S.C. paragraph 1001 and 33 U.S.C. paragraph 1319. (Penalties under these statutes may include fines up to \$10,000 and or maximum imprisonment of between 6 months and 5 years). Signature of Principal Officer or Authorized Agent / Date

Facility Name: Omega Protein Address: Reedville, VA.

VPDES Permit No.: VA0003867	
Report Period: From 13/14/67 To 13./2009	
Paint Area COMPLIANCE / NONCOMPLIANCE * (check as appropriate)	
*Comments on Noncompliance	
Name of Principal Exec. Officer or Authorized Agent / Title	
I certify under penalty of law that this document and all attachments were prepared under my direct supervision in accordance with a system designed to assure that qualified personnel properly gather evaluate the information submitted. Based on my inquiry of the person or persons who manage the syor those persons directly responsible for gathering the information, the information submitted is to the bright my knowledge and belief true, accurate and complete. I am aware that there are significant penaltic submitting false information, including the possibility of fine and imprisonment for knowing violations. Submitting false information, including the possibility of fine and imprisonment for knowing violations. Submitting false information, including the possibility of fine and imprisonment for knowing violations. Submitting false information, including the possibility of fine and imprisonment for knowing violations. Submitting false information, including the possibility of fine and imprisonment for knowing violations. Submitting false information, including the possibility of fine and imprisonment for knowing violations. Submitting false information, including the possibility of fine and imprisonment for knowing violations. Submitting false information, including the possibility of fine and imprisonment for knowing violations. Submitting false information for false information false information for false information. Submitting false information for false information false informa	ystem est of es for see 18

Facility Name: Omega Protein Address: Reedville, VA.
VPDES Permit No.: VA0003867
Report Period: From 13/21/09 To 19/27/09
Paint Area COMPLIANCE / NONCOMPLIANCE * (check as appropriate)
<u> </u>
*Comments on Noncompliance
The Son Solution Technical Segments Superiores Name of Principal Exec. Officer or Authorized Agent / Title
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See 18 U.S.C. paragraph 1001 and 33 U.S.C. paragraph 1319. (Penalties under these statutes may include fines up to \$10,000 and or maximum imprisonment of between 6 months and 5 years). Signature of Principal Officer or Authorized Agent / Date

Facility Name: Omega Protein Address: Reedville, VA.
VPDES Permit No.: VA0003867 Report Period: From 104007To 19131/07
Report Period: From 1979
Paint Area (check as appropriate)
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*Comments on Noncompliance
, , ,
Threedore Schultz / Technical Supervisor
/ / Address or Authorized Agent / Title
Name of Principal Exect State of all ottachments were prepared under my direction of
Name of Principal Exec. Officer of Authorized and all attachments were prepared under my direction or a certify under penalty of law that this document and all attachments were prepared under my direction or certify under penalty of law that this document and all attachments were prepared under my direction or certify under penalty of law that this document and all attachments were prepared under my direction or certification or persons who manage the system supervision in accordance with a system designed to assure that qualified personnel properly gather and supervision in accordance with a system designed to assure that qualified personnel properly gather and supervision in accordance with a system designed to assure that qualified personnel properly gather and supervision in accordance with a system designed to assure that qualified personnel properly gather and supervision in accordance with a system designed to assure that qualified personnel properly gather and supervision in accordance with a system designed to assure that qualified personnel properly gather and supervision in accordance with a system designed to assure that qualified personnel properly gather and supervision in accordance with a system designed to assure that a system designed to a system desig
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. 640 000 apa of maximum.
1/5/2010
Signature of Principal Officer or Authorized Agent / Date



8201 County Drive

Disputanta, Virginia 23842-6144

Phone: 804-991-3213 Facsimile: 804-991-2194

E-mail: swiftcreekinc@aoi.com

NVIRONMENTAL, INC.

December 29, 2009 Project #06-012

Mr. William Purcell Omega Protein P.O. Box 175 Reedville, Virginia 22801

Re:

4th Quarter 2009 Ground Water Monitoring Report

Aerated Lagoon

Omega Protein, Reedville, Virginia VPDES Permit No. VA0003867

Dear Mr. Purcell:

With requirements to the VPDES Permit No. VA0003867, Swift Creek Environmental, Inc, has completed the 2009, 4th quarterly ground water monitoring report for the above referenced facility. The location of the facility is depicted on Figure 1 - Site Vicinity Map. The lagoon wells sampled are designated and identified as monitor wells, MWL1, MWL2, MWL3, MWL4, MWL5 and MWL6. The location of the lagoon monitor wells are presented on the attached Potentiometric Surface Map - Figure 2.

A third order survey was conducted to determine relative well elevations and static ground water levels. Monitor well, ground water levels and relative elevations are presented in Table 1. An arbitrary datum of 10.00 feet (from USGS, 7.5 minute Reedville, Virginia Quadrangle) was established as a benchmark.

Monitor Well	Total Depth (feet)	Depth to GW (feet)	PID Reading (ppm)	Elevation - Top of Casing	Elevation - GW (feet)	
MWL1	15.0	10.38	0	13.52	3.14	
MWL2	15.0	9.88	0	12.20	2.32	
MWL3	15.0	2.62	0	8.36	5.74	
MWL4	15.0	9.37	0	14.80	5.43	
MWL5 15,0		1.13	0	12.48	11.35	
MWL6	15.0	0.03	0	12.17	12.14	

Topographic and groundwater data indicates that ground water flow is to the south. Attached as Figure 2 is the Lagoon Potentiometric Surface Map.

On December 17, 2009, the lagoon monitor wells were developed and sampled for parameters as required in the VPDES Permit and requested by the VDEQ. Ground water samples were obtained from on-site monitor wells MWL1 through MWL6. Depth to ground water and total well depths were obtained using an oil/water interface probe to calculate the height of the standing water column in the monitor wells. After the volume of standing water was calculated in the monitor wells, a minimum of three well volumes of ground water was removed. Ground water samples were then collected using clean, disposable, plastic bailers to minimize the potential for cross contamination of monitor wells. The samples were placed in an insulated cooler packed with ice for shipment to the laboratory. The water samples were submitted to Air, Water and Soil Laboratories, Incorporated for laboratory analysis of Aluminum, Copper, Silver, Fecal Coliform, Nitrate, Chloride, Ammonia, TOC and Phosphorous. Chain of Custody forms were completed on-site and submitted with the samples. Chemical results for the 2009, 4th Quarter sampling event are presented in Tables 2 and 3. The Certificates of Analyses and Chain of Custody are attached.

Sample ID/Monitor well	Turbidily	pН	Specific Conductivity	Dissolved Oxygen	Temperature	
SC-OP-MWL1	36.20	5.80	1167	1.41	12.3	
SC-OP-MWL2	5.81	5.09	1129	1.03	12.7	
SC-OP-MWL3	14.71	5.75	824	0.75	10.8	
SC-OPMWL4	3.18	5.78	323	4.50	12.5	
SC-OP-MWL5	-MWL5 70.5		1157	2.07	9.0	
SC-OP-MWL6	25.50	5.38	158	2,10	9.8	
Units	μn	ຣບ	u/s mg/l		Celsius	
Quantification Limits	.01	0.01	1.0	.01	0.1	

Sample ID Monitor well	AI	Cu	Ag	E-Coll	Nitrate	Chloride	Ammonia	TOC	Phosphorus
SC-OP-MWL1	2.60	0.0117	<0.01	<1	0.8	115	0.53	29.2	0.11
SC-OP-MWL2	7.22	<0.01	<0.01	<1	8.3	120	8.08	4.2	0.04
SC-OP-MWL3	2.18	<0.01	<0.01	<1	17.9	B2.4	0.68	1.2	0.03
SC-OP-MWL4	11.7	<0.01	<0.01	<1	3.9	22.2	<0.1	2,6	0.07
SC-OP-MWL5	5.58	<0.01	<0.01	<1	2.5	97.8	3.34	1.8	0.02
SC-OP-MWL6	0.858	<0.01	<0.01	<1	0.8	7.0	<0.1	1.2	0.02
Units	mg/l	mg/i	mg/l	MPN	mg/l	mg/I	mg/l	mg/l	mg/l
Quantification Limits	0.05	0.01	0.01	1.0	0.1	1.0	0.1	1.0	0.05-0.5
002 Outfall Discherge Limits	-	NL	NL	200	NL	NL	45	NL	NL
MCL's Primary or Secondary	•	1.3	0.1	0.0	10	250	S#0		•

Based on the current sampling event data, the August 31, 2009 recorded E-Coli concentration of 1410 MPN/100ml in monitor well, MWL1 was an anomaly and not indicative of potential ground water impairment.

The historical median concentration for Nitrate in monitor well, MWL3 is 9.11 mg/kg with previously recorded concentrations ranging between 3.02 mg/l and 18.4 mg/l. Although the current recorded Nitrate concentration is above the MCL, it is within the historical concentration range.

All other parameters quantitatively analyzed for this sampling event were either below Outfall Discharge Limits and/or the federal primary or secondary drinking water standard. These parameters were also within historical concentration ranges for each analyte. The next quarterly ground water sampling event is scheduled for March 2010.

Should you have any questions regarding this letter, please contact me at 804.991.3213. Thank you for the opportunity to provide these services.

Sincerely,

cc:

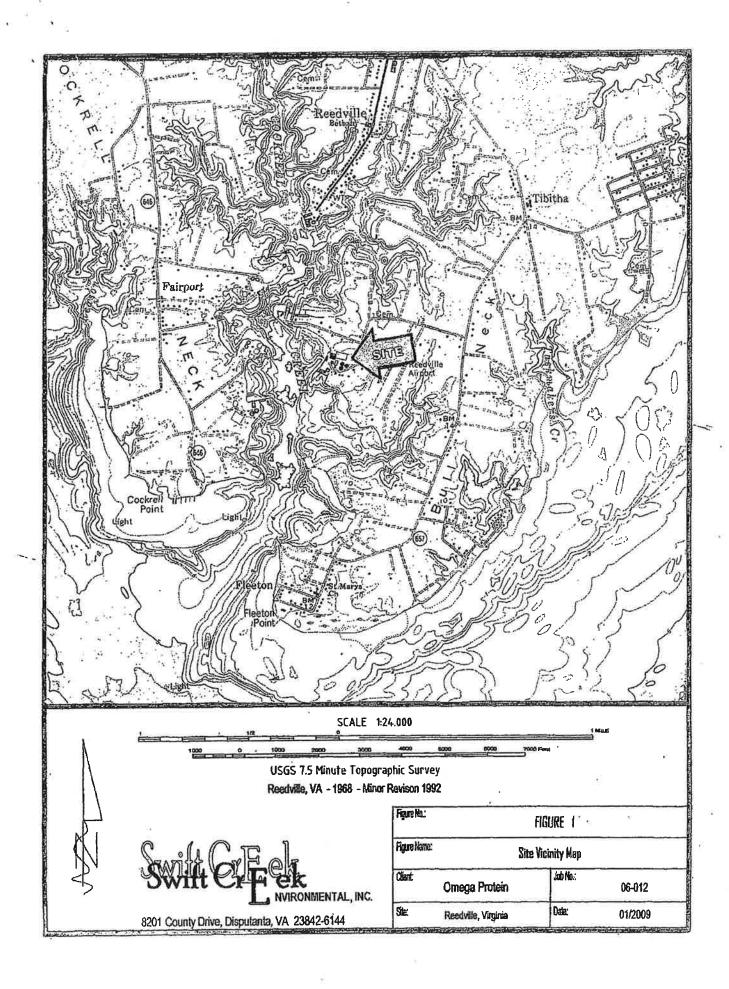
B. Thomas Houghton, Principal Virginia Professional Geologist #950

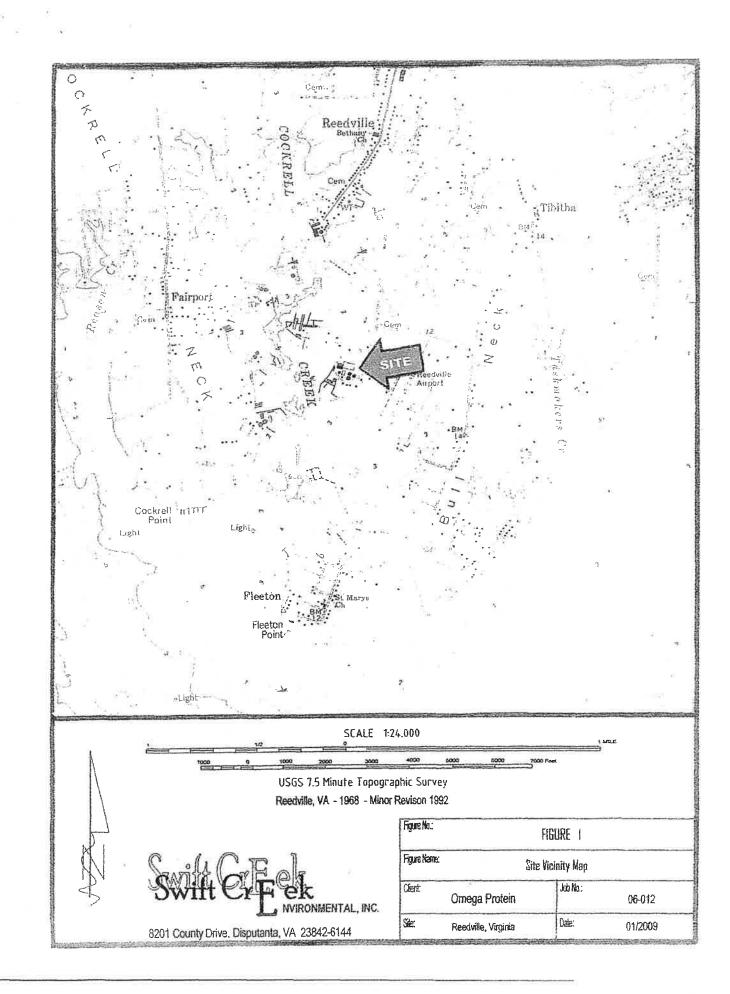
attachments: Site Vicinity Map

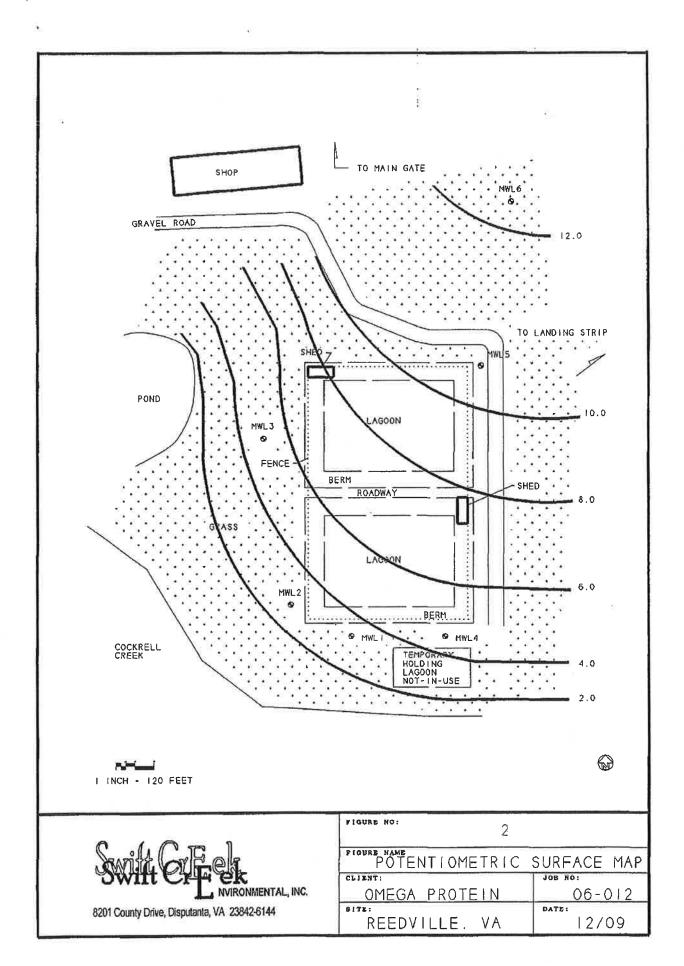
Potentiometric Surface Map

Certificates of Analyses and Chain of Custody

Ms. Denise Mosca - VDEQ Piedmont Regional Office









Certificate of Analysis

Final Report

Laboratory Order ID 09120346

Client Name:

Swift Creek Environmental, Inc.

8201 County Drive

Disputanta, VA 23842

Date Received: Date Issued:

December 17, 2009

December 28, 2009

Submitted To: Tom Houghton

Project Number:

06-012

Client Site I.D.: Lagoon Well

Sample I.D.: SC-OP-MWL1

Purchase Order

06-012

09120346-001 Laboratory Sample I.D.:

	Date/Time Sampled: 12/17/09	11:45				Analysis	
*	Parameter	Method	Sample Results		Rep Limi	Date/Time	Analyst
	E. Coli	Colliert 18/QT	< 1 mpn/100mL		1	12/17/09 15:20	WBP
	Aluminum	SW6010C	2.50 mg/L	e e	0.0500	12/22/09 14:25	CGT
1	Copper	SW6010C	0.0117 mg/L		0.0100	12/22/09 14:25	CGT
	Silver	SW6010C	< 0.01 mg/L		0.0100	12/22/09 14;25	CGT
	Ammonia	EPA350.1/R2.0	0.53 mg/L		0.10	12/21/09 13:30	LMT
	Chloride	EPA300.0/R2.1	115 mg/L	e :	1.0	12/23/09 17:25	RPF
	Nitrate	Calc.	0.8 mg/L		0.1	12/18/09 10:19	JPV
	Nitrate+Nitrite	SM18/4500-NO3 F	0.8 mg/L		0.1	12/18/09 12:56	LMT
	Nitrīte	SM18/4500-NO2 B	< 0.05 mg/L		0.05	12/18/09 10:19	JPV
	Phosphorus, Total	SM18/4500-P E	0.11 mg/L		0.01	12/22/09 12:55	JPV
	Total Organic Carbon (TOC)	SW9060	29.2 mg/L		1.0	12/28/09 11:43	BHW

Sample I.D.: SC-OP-MWL2

Laboratory Sample I.D.:

09120346-002

Date/Time Sampled: 12/17/09	12:01			Analysis	
Parameter	Method	Sample Results	Rep Limi	Date/Time	Analyst
E. Coli	Colilert 18/QT	< 1 mpn/100mL	1	12/17/09 15:20	WBP
Aluminum	SW6010C	7.22 mg/L	0.0500	12/22/09 14:33	CGT
Copper	SW6010C	< 0.01 mg/L	0.0100	12/22/09 14:33	CGT
Silver	SW6010C	< 0.01 mg/L	0.0100	12/22/09 14:33	CGT
Ammonia	EPA350.1/R2.0	8.08 mg/L	0.10	12/21/09 13:32	LMT
Chloride	EPA300.0/R2.1	120 mg/L	1.0	12/23/09 18:08	RPF
Nitrate	Calc.	8.3 mg/L	0.1	12/18/09 10:19	JPV
Nltrate+Nitrite	SM18/4500-NO3 F	8.3 mg/L	0.1	12/18/09 13:08	LMT
Nitrite '	SM18/4500-NO2 B	< 0.05 mg/L	0.05	12/18/09 10:19	JPV
Phosphorus, Total	SM18/4500-P E	0.04 mg/L	0.01	12/22/09 12:55	JPV
Total Organic Carbon (TOC)	SW9060	4.2 ma/L	1.0	12/23/09 15:33	BHW



Certificate of Analysis

Final Report

Laboratory Order ID 09120346

Client Name:

Swift Creek Environmental, Inc.

8201 County Drive

Disputanta, VA 23842

Date Received:

December 17, 2009

Date Issued:

December 28, 2009

Submitted To: Tom Houghton

Project Number:

06-012

Cilent Site I.D.: Lagoon Well

Purchase Order

06-012

Sample I.D.: SC-OP-MWL3

Date/Time Sampled: 12/17/09 12:08

Parameter

Laboratory Sample I.D.: 09120346-003

Analysis

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200	Parameter	Method	Sample Results	Rep Limi	Date/Time	Analyst
	E. Coli	Colliert 18/QT	<.1 mpn/100mL	1	12/17/09 15:20	WBP
	Aluminum	SW6010C	2,18 mg/L	0.0500	12/22/09 14:36	CGT
	Copper	SW6010C	< 0.01 mg/L	0.0100	12/22/09 14:36	CGT
	Silver	SW6010C	< 0.01 mg/L	0.0100	12/22/09 14;36	CGT
	Ammonia	EPA350.1/R2.0	0.68 mg/L	0.10	12/21/09 13:34	LMT
36	Chloride	EPA300.0/R2.1	82.4 mg/L	1.0	12/23/09 18:22	RPF
	Nitrate	Calc.	17.9 mg/L	0.1	12/18/09 10:19	JPV _y
	Nitrate+Nitrite	SM18/4500-NO3 F	17.9 mg/L	0.1	12/18/09 13:11	LMT
	Nitrite	SM18/4500-NO2 B	< 0.05 mg/L	0.05	12/18/09 10:19	JPV
	Phosphorus, Total	SM18/4500-P E	0.03 mg/L	0.01	12/22/09 12:55	JPV
	Total Organic Carbon (TOC)	SW9060	1.2 mg/L	1.0	12/23/09 15:33	BHW

Sample I.D.: SC-OP-MWL4

Laboratory Sample I.D.:

09120346-004

Date/Time Sampled: 12/17/09 11:36 Analysis Date/Time Analyst Rep Limi Method Sample Results Parameter 12/17/09 15:20 WBP Colilert 18/QT < 1, mpn/100mL E. Coli 12/22/09 14:39 CGT SW6010C 11.7 mg/L 0.0500 Aluminum 12/22/09 14:39 SW6010C < 0.01 mg/L 0.0100 CGT Copper 12/22/09 14:39 CGT SW6010C < 0.01 mg/L 0.0100 Silver EPA350.1/R2.0 < 0.1 mg/L 0.10 12/21/09 14:03 LMT Ammonia 12/23/09 19:04 RPF EPA300.0/R2.1 22.2 mg/L Chloride 1.0 3.9 mg/L 12/18/09 10:19 JPV Nitrate Calc. 0.1 12/18/09 13:14 Nitrate+Nitrite SM18/4500-NO3 F 3.9 mg/L 0.1 LMT 12/18/09 10:19 **JPV** Nitrite 1 SM18/4500-NO2 B 0.05 < 0.05 mg/L **JPV** SM18/4500-P E 0.07 mg/L 0.01 12/22/09 12:55 Phosphorus, Total SW9060 2.5 mg/L 1.0 12/23/09 15:33 BHW Total Organic Carbon (TOC)



Certificate of Analysis

Final Report

Laboratory Order ID 09120346

Client Name:

Swift Creek Environmental, Inc.

8201 County Drive

Disputanta, VA 23842

Date Received:

December 17, 2009

Date Issued:

December 28, 2009

Submitted To: Tom Houghton

Project Number:

06-012

Client Site I.D.: Lagoon Well

Purchase Order

06-012

09120346-005

Sample I.D.: SC-OP-MWL5

Laboratory Sample I.D.:

Date/Time Sampled: 12/17/	D9 11:06			Analysis	
Parameter	Method	Sample Results	Rep Limi	Date/Time	Analyst
E. Coli	Colilert 18/QT	< 1 mpn/100mL	1	12/17/09 15:20	WBP
Aluminum	SW6010C	5.58 mg/L	0.0500	12/22/09 14:42	CGT
Copper	SW6010C	< 0.01 mg/L	0.0100	12/22/09 14:42	CGT
Silver	SW6010C	< 0.01 mg/L	0.0100	12/22/09 14;42	CGT
Ammonla	EPA350.1/R2.0	3.34 mg/L	0.10	12/21/09 14:05	LMT
Chloride	EPA300.0/R2.1	97.8 mg/L	1.0	12/23/09 19:18	RPF
Nitrate	Calc.	2.5 mg/L	0.1	12/18/09 10:19	JÞV
Nitrate+Nltrite	SM18/4500-NO3 F	2.5 mg/L	0.1	12/18/09 13:17	LMT
Nitrite	SM18/4500-NO2 B	< 0.05 mg/L	0.05	12/18/09 10:19	JPV
Phosphorus, Total.	SM18/4500-P E	0.02 mg/L	0.01	12/22/09 12:66	JPV
Total Organic Carbon (TOC)	SW9060	1.8 mg/L	1.0	12/23/09 15:33	BHW

Sample I.D.: SC-OP-MWL6

Laboratory Sample I.D.:

09120346-006

	Date/Time Sampled: 12	2/17/09	11:20			Analysis	
	Parameter		Method	Sample Results	Rep Limi	Date/Time	Analyst
	E. Coli		Colilert 18/QT	< 1 mpn/100mL	1	12/17/09 15:20	WBP
	Aluminum		SW6010C	0.8586 mg/L	0.0500	12/22/09 14:45	CGT
	Copper		SW6010C	< 0.01 mg/L	0.0100	12/22/09 14:45	CGT *
	Silver	8.	SW6010G	< 0.01 mg/L	0.0100	12/22/09 14:45	CGT
	Ammonia		EPA350.1/R2.0	< 0.1 mg/L	0.10	12/21/09 14:08	LMT
	Chloride	34	EPA300.0/R2.1	7.0 mg/L	1.0	12/23/09 19:32	RPF
	Nitrate		Calc.	0.8 mg/L	0.1	12/18/09 10:19	JPV
	Nitrate+Nltrite		SM18/4500-NO3 F	0.8 mg/L	0.1	12/18/09 13:20	LMT
	Nitrite '		SM18/4500-NO2 B	< 0.05 mg/L	0.05	12/18/09 10:19	JPV
249	Phosphorus, Total		SM18/4500-P E	0.02 mg/L	0.01	12/22/09 12:55	JPV
	Total Organic Carbon (TOC)		SW9060	1,2 mg/l.	1.0	12/23/09 15:33	BHW



Certificate of Analysis

Final Report

Laboratory Order ID 09120346

Client Name:

Swift Creek Environmental, Inc.

8201 County Drive

Disputanta, VA 23842

Date Received: Date Issued:

December 17, 2009

December 28, 2009

Submitted To: Tom Houghton

Project Number:

06-012

Client Site I.D.: Lagoon Well

Purchase Order

06-012

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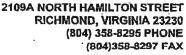
Laboratory Manager

The test results listed in this report relate only to the samples submitted to the laboratory and as received by the Laboratory.

Unless otherwise noted, the test results for solid materials are calculated on a dry weight basis. Analyses for pH, dissolved oxygen, temperature, residual chlorine and sulfile that are performed in the laboratory do not meet NELAC requirements due to extremely abort holding times. These analyses should be performed in the field.

The signature on the final report certifies that these results conform to all applicable NELAC standards unless otherwise specified. For a complete list of the Laboratory's NELAC certified parameters please contact customer service.

This report shall not be reproduced except in full without the expressed and written approval of an authorized representative of Air Woter & Sail



COOLER TEMP

09120346

Recd: 12/17/09

5 Days

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CHAIN OF CUSTODY CLIENT NAME: Swilt Creek Symposymental PROJECT NAME: SITE NAME: LAADON CLIENT CONTACT: CLIENT ADDRESS: PROJECT NUMBER: 06-012 CLIENT PHONE NUMBER: P.O. NUMBER: 06-012 CLIENT FAX NUMBER: 504 991- 1194 REGULATORY AUTHORITY: VDFQ EMAIL: SWHTCREKING @aol.com. is sample for compliance reporting? PWS I.D. #: YES. (NO Is sample from a chlorinated supply? SAMPLER NAME (PRINT): D Turn Around Time: SAMPLER SIGNATURE: Day(s) MATRIX NO Have ammonia and TKN samples been verified to be dechlorinated at the time of sampling?: COMMENTS ANALYSIS / (PRESERVATIVE) Field Filtered (Dissolved Metals) Quote I.D.: Ground Water / Surface Water Waste Water / Storm Water Composite Start Date Composite Start Time Date Grab Time or Composite Stop Time Number of Containers CLIENT SAMPLE I.D. Grab Date or Composite Stop D Grab Date Composite Drinking Solids PLEASE NOTE Grab PRESERVATIVE(S) or PUMP RATE (Limin) Soil X 1) SC-OP-MWLI X × 2) 5C-OP-MWL2 12:01 17:08 11:360 11:06 11:20 7) 8) 9) 10)

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Level III

Level IV

DATE / TIME

12 17 09 3%

DATE / TIME

DATE / TIME

RECEIVED:

RECEIVED:

RELINQUISHED:

RELINQUISHED:

QC Data Package LAB USE ONLY

SCE

Lagoon Well



LABORATORIES, INC.

2109A North Hamilton Street • Richmond, Virginia 23230 • Tel: (804) 358-8295 Fax: (804) 358-8297

	Sample Conditions Checklist	SCE Lagoon Well	09120346 DUE: 5 Days Recd: 12/17/09
Opene (sign)	d by: (print) Lab ID No.: Date Cooler Opened:	12-17-0	Ĵ
1.	How were samples received? Fed Ex UPS Courier Walk In	YES NO	N/A
2.	Were custody seals used?		8
3. 4. 5. 6. 7. 8. 9 10 11	If yes, are custody seals unbroken and intact at the date and time of arrival? Are the custody papers filled out completely and correctly? Do all bottle labels agree with custody papers? Are the samples received on ice? Is the temperature blank or representative sample within acceptable limits? (4 degrees Celsius +/-2) Are all samples within holding time for requested tests? Is a sufficient amount of sample provided to perform the tests indicated? Are all samples in proper containers for the analyses requested? Are all samples appropriately preserved for the analyses requested? Are all volatile organic containers free of headspace?		
	COMMENTS	16 Table 14	• 5 6



Order ID

09120346

pH Preservation Log

Page 1 of 2

Analyst Performing Check:

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Page ____of ___

WATER SOIL

Order ID 69120346

pH Preservation Log

Date Performed: 12/17

Analyst Performing Check:

GW

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BMP

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outfall



8201 County Drive
Disputanta, Virginia 23842-6144
Phone: 804-991-3213 Facsimile: 804-991-2194
E-mail: swiftcreekinc@aol.com

NVIRONMENTAL, INC.

RECEIVED
MAR 18 2010
PRO

March 12, 2010 Project #06-012

Mr. William Purcell Omega Protein P.O. Box 175 Reedville, Virginia 22801

Re:

4th Quarter 2009 Ground Water Monitoring Report

Aerated Lagoon

Omega Protein, Reedville, Virginia VPDES Permit No. VA0003867

Dear Mr. Purcell:

With requirements to the VPDES Permit No. VA0003867, Swift Creek Environmental, Inc, has completed the 2010, 1st quarterly ground water monitoring report for the above referenced facility. The location of the facility is depicted on Figure 1 - Site Vicinity Map. The lagoon wells sampled are designated and identified as monitor wells, MWL1, MWL2, MWL3, MWL4, MWL5 and MWL6. The location of the lagoon monitor wells are presented on the attached Potentiometric Surface Map - Figure 2.

A third order survey was conducted to determine relative well elevations and static ground water levels. Monitor well, ground water levels and relative elevations are presented in Table 1. An arbitrary datum of 10.00 feet (from USGS, 7.5 minute Reedville, Virginia Quadrangle) was established as a benchmark.

Monitor Well	Total Depth (feet)	Depih to GW (feet)	PID Reading (ppm)	Elevation - Top of Casing	Elevalion - GW (feet)
MWL1	15.0	10.46	0	13.52	3.06
MWL2	15.0	7.90	0	12.20	4.30
MWL3	15.0	2.94	0	8.36	5.42
MWL4	15.0	10.53	0	14.80	4.27
MWL5	15.0	1.01	O	12.48	11.47
MWL6	15.0	0.00	0	12.17	12.17

Topographic and groundwater data indicates that ground water flow is to the south. Attached as Figure 2 is the Lagoon Potentiometric Surface Map.

On March 4, 2010, the lagoon monitor wells were developed and sampled for parameters as required in the VPDES Permit and requested by the VDEQ. Ground water samples were obtained from on-site monitor wells MWL1 through MWL8. Depth to ground water and total well depths were obtained using an oil/water interface probe to calculate the height of the standing water column in the monitor wells. After the volume of standing water was calculated in the monitor wells, a minimum of three well volumes of ground water was removed. Ground water samples were then collected using clean, disposable, plastic bailers to minimize the potential for cross contamination of monitor wells. The samples were placed in an insulated cooler packed with ice for shipment to the laboratory. The water samples were submitted to Air, Water and Soil Laboratories, incorporated for laboratory analysis of Aluminum, Copper, Silver, Fecal Coliform, Nitrate, Chloride, Ammonia, TOC and Phosphorous. Chain of Custody forms were completed on-site and submitted with the samples. Chemical results for the 2010, 1st Quarter sampling event are presented in Tables 2 and 3. The Certificates of Analyses and Chain of Custody are attached.

Sample ID/Monitor well	Turbidity	pН	Specific Conductivity	Dissolved Oxygen	Temperature
SC-OP-MWL1	37.3	5.93	998	1.81	12.2
SC-OP-MWL2	6.3	5.33	1020	1.11	14.1
SC-OP-MWL3	20.2	6.02	841	1.00	11.6
SC-OPMWL4	11.1	5.99	333	4,11	13.7
SC-OP-MWL5	87.0	5.62	121	2.22	12.7
SC-OP-MWL6	28.0	5.43	166	2.92	12.4
Units	μn	su	น/ร	mg/l	Celsius
Quantification Limits	.01	0.01	1.0	.01	0.1

Sample ID Monitor well	ΑI	Cu	Ag	E-Coll	Nitrate	*Chloride	Ammonia	тос	Phosphorus
SC-OP-MWL1	1,10	<0.01	<0.01	<1	1.8	116	3.41	19.8	0.23
SC-OP-MWL2	2.73	<0.01	<0.01	<1	13.4	158	8.52	4.4	0.02
SC-OP-MWL3	1.98	<0.01	<0.01	<1	13.0	33.2	0.25	1.1	0,06
SC-OP-MWL4	1.65	0.012	<0.01	<1	1.2	12.8	<0.1	2.6	0.05
SC-OP-MWL5	4.97	<0.01	<0.01	<1	0.3	14.8	0.60	6.3	0.12
SC-OP-MWL6	5.60	<0.01	<0.01	<1	0.7	6.8	<0.1	1.1	0.13
Units	mg/l	mg/l	mg/l	MPN	mg/l	mg/l	mg/l	mg/l	mg/l
Quantification Limits	0.05	0.01	0.01	1.0	0.1	1.0	0.1	1.0	0.05-0.5
002 Outfall Discharge Limits	».	NĻ	NL	200	NL	NL	45	NL	NL
MCL's Primary or Secondary		1.3	0.1	0.0	10	250	÷	8	•

All parameters quantitatively analyzed for this sampling event were below Outfall Discharge Limits. Although the Nitrate recorded in monitor wells MW2 and MW3 were slightly above the federal primary drinking water standard they were within historical concentration ranges. The next quarterly ground water sampling event is scheduled for June 2010.

Should you have any questions regarding this letter, please contact me at 804.991.3213. Thank you for the opportunity to provide these services.

Sincerely,

40

B. Thomas Houghton, Principal Virginia Professional Geologist #950

attachments:

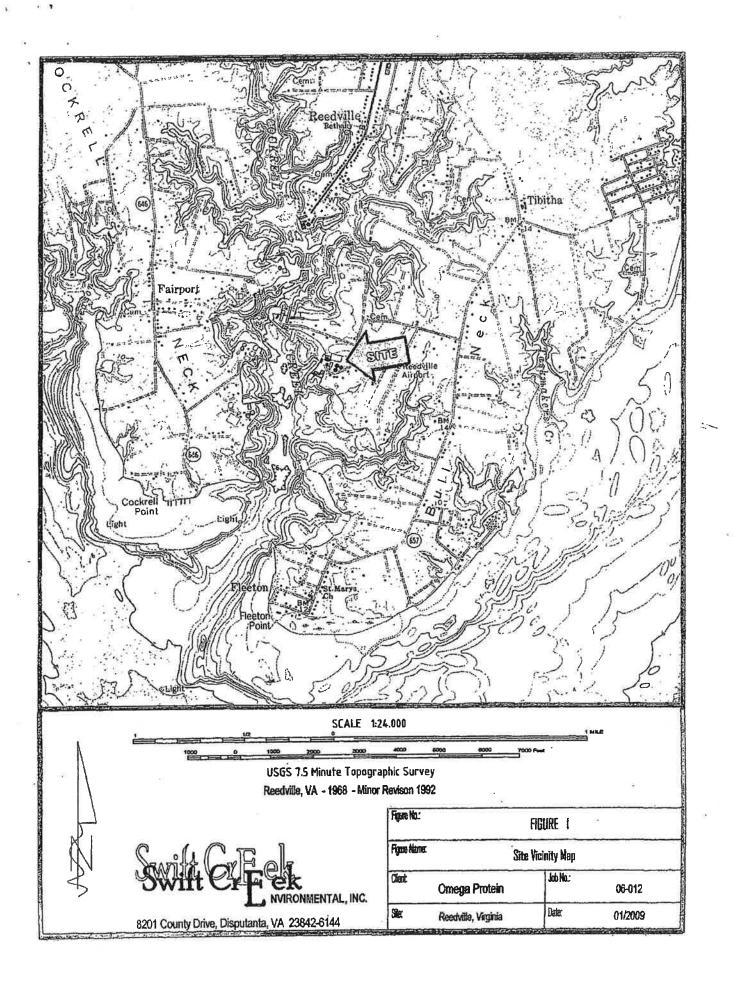
Site Vicinity Map

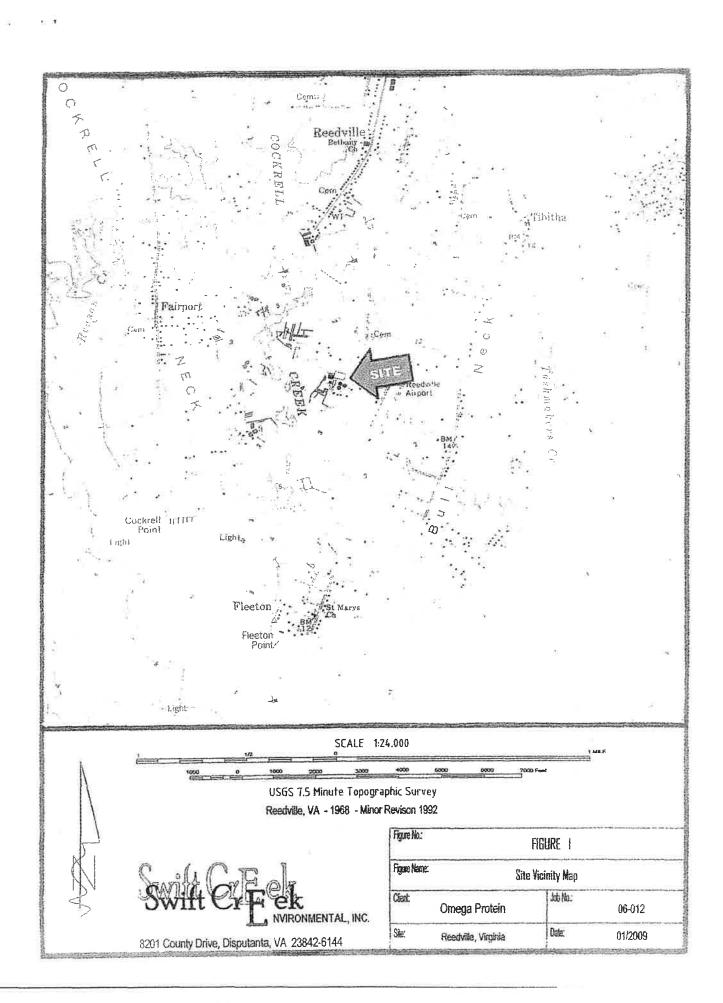
Potentiometric Surface Map

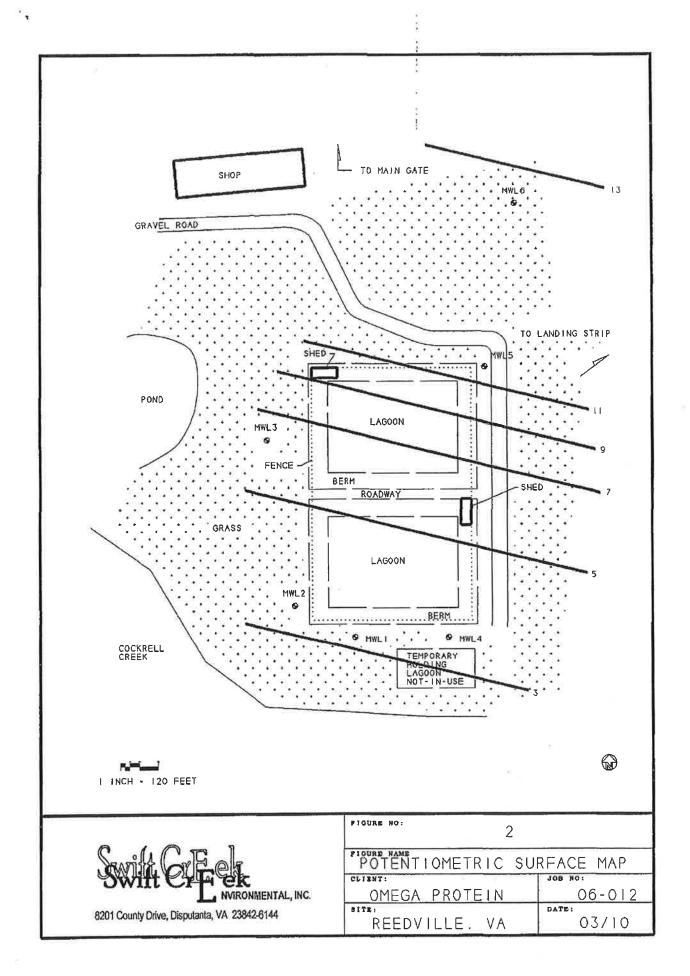
Certificates of Analyses and Chain of Custody

cc:

Ms. Denise Mosca - VDEQ Piedmont Regional Office









Certificate of Analysis

Final Report

Laboratory Order ID 10030124

Client Name:

Swift Creek Environmental, Inc.

8201 County Drive

Disputanta, VA 23842

Date Received:

March 04, 2010

Date Issued:

March 11, 2010

Italita, VA 2007

Submitted To: Tom Houghton

Total Organic Carbon (TOC)

Project Number:

06-012 06-012

Client Site I.D.: Omega Protein

Purchase Order,

03/08/10 12:43

1.0

BHW

Sample I.D.: SC-OP-MWL	.1		Laboratory Sam	ple I.D.: 10	030124-001
Date/Time Sampled: 03/04/		(%)		Analysis	I X
Parameter	Method	Sample Results	Rep Limi	Date/Time	Analyst
E. Coli	Colilert 18/QT	< 1 mpn/100mL	1	03/04/10 15:10	WBP
Aluminum	SW6010C	1.10 mg/L	0.5000	03/11/10 14:36	MWL
Copper	SW6010C	< 0.01 mg/L	0.0100	03/11/10 14:36	MWL
Silver	SW6010C	< 0.01 mg/L	0.0100	03/11/10 14;36	MWL
Ammonia	EPA350,1/R2.0	3.41 mg/L	0.10	03/08/10 14:03	SLH
Chloride	EPA300.0/R2.1	116 mg/L	1.0	03/08/10 17:59	CL
Nitrate	Calc.	1.8 mg/L	0.1	03/04/10 12:36	LMT/JPV
Nitrate+Nitrile	SM18/4500-NO3 F	1.8 mg/L	0.1	03/05/10 14:22	JPV
Nitrite	SM18/4500-NO2 B	< 0.05 mg/L	0.05	03/04/10 12:36	LMT/JPV
Phosphorus, Total	SM18/4500-P E	0.23 mg/L	0.01	03/08/10 9:09	JPV
Total Organic Carbon (TOC)	SW9060	19.8 mg/L	1.0	03/08/10 12:43	BHW

Laboratory Sample I.D.: 10030124-002 SC-OP-MWL2 Sample I.D.: Date/Time Sampled: 03/04/10 10:00 Analysis Date/Time Sample Results Rep Limi Analyst Method Parameter 03/04/10 15:10 WBP < 1 mpn/100mL Colilert 18/QT 1 E. Coli MWL 0.5000 03/11/10 14:38 SW6010C 2.73 mg/L Aluminum MWL < 0.01 mg/L 0.0100 03/11/10 14:38 SW6010C Copper MWL 0.0100 03/11/10 14:3B SW6010C < 0.01 mg/L Silver 03/08/10 14:05 SLH EPA350.1/R2.0 8.52 mg/L 0.10 Ammonia CL 03/08/10 18:13 EPA300.0/R2.1 158 mg/L 1.0 Chloride Caic. 13.4 mg/L 0.1 03/04/10 12:36 LMT/JPV Nitrate 03/05/10 14:25 **JPV** SM18/4500-NO3 F 13.4 mg/L 0.1 Nitrate+Nitrite SM18/4500-NO2 B < 0.05 mg/L 0.05 03/04/10 12:36 LMT/JPV Nitrite JPV 0.01 03/08/10 9:09 SM18/4500-P E 0.02 mg/L Phosphorus, Total

4.4 mg/L

SW9060



Certificate of Analysis

Final Report

Laboratory Order ID 10030124

Client Name:

Swift Creek Environmental, Inc.

8201 County Drive

Disputanta, VA 23842

Date Received: Date Issued:

March 04, 2010

March 11, 2010

Submitted To: Tom Houghton

Project Number:

06-012

Client Site I.D.: Omega Protein

Purchase Order

06-012

Sample I.D.: SC-OP-N	ML3		Laboratory Sam	pie i.D.:	10030124-003
Date/Time Sampled: 03	3/04/10 10:42			Analysis	
Parameter	Method	Sample Results	Rep Limi	Date/Time	Analyst
E. Coli	Colilert 18/QT	< 1 mpn/100mL	1	03/04/10 15:1	0 WBP
Aluminum	SW6010C	1.98 mg/L	0.5000	03/11/10 14:4	O MWL
Copper	SW6010C	< 0.01 mg/L	0.0100	03/11/10 14:4	0 MWL
Cities	E/Men40C	< 0.01 mg/l	0.0100	03/11/10 14:4	u MMI

Silver SW6010C < 0.01 mg/L 0.0100 03/08/10 14:07 SLH Ammonia EPA350.1/R2.0 0.25 mg/L 0.10 03/0B/10 18:27 CL EPA300.0/R2.1 33.2 mg/L 1.0 Chloride 13.0 mg/L 0.1 03/04/10 12:36 LMT/JPV Calc. Nitrate JPV 13.0 mg/L 0.1 03/05/10 14:37 SM18/4500-NO3 F Nitrate+Nitrite 03/04/10 12:36 LMT/JPV Nitrite SM18/4500-NO2 B < 0.05 mg/L 0.05 JPV 0.06 mg/L 0.01 03/08/10 9:09 SM18/4500-P E Phosphorus, Total

1.1 mg/L

Sample I.D.: SC-OP-MWL4

Total Organic Carbon (TOC)

SW9060

Laboratory Sample I.D.:

1.0

10030124-004

BHW

03/08/10 12:43

Callibia india	•			,,		
Date/Time Sampled: 03/04/	10 09:49				Analysis	
Parameter	Method	Sample Results		Rep Limi	Date/Time	Analyst
 E. Coll	Colliert 18/QT	< 1 mpn/100mL		1	03/04/10 15:10	WBP
Aluminum	SW6010C	1.65 mg/L		0.5000	03/11/10 14:43	MWL
Copper	SW6010C	0.0120 mg/L		0.0100	03/11/10 14:43	MWL
Silver	SW6010C	< 0.01 mg/L		0.0100	03/11/10 14:43	MWL
Ammonia	EPA350.1/R2.0	< 0.1 mg/L		0.10	03/08/10 14:10	SLH
Chloride	EPA300.0/R2.1	12.8 mg/L	9/1	1.0	03/08/10 18:41	CL
Nitrate	Calc.	1.2 mg/L		0.1	03/04/10 12:36	LMT/JPV
Nitrate+Nitrite	SM18/4500-NO3 F	1.2 mg/L		0.1	03/05/10 14:40	JPV
Nitrite	SM18/4500-NO2 B	< 0.05 mg/L		0.05	03/04/10 12:36	LMT/JPV
Phosphorus, Total	SM18/4500-P E	0.05 mg/L		0.01	03/08/10 9:09	JPV
Total Organic Carbon (TOC)	SW9060	2.6 mg/L		1.0	03/06/10 12:43	BHW



Certificate of Analysis

Final Report

Laboratory Order ID 10030124

Client Name:

Swift Creek Environmental, Inc.

8201 County Drive

Disputanta, VA 23842

Date Received: Date Issued:

March 04, 2010

March 11, 2010

Submitted To: Tom Houghton

Project Number:

06-012

Client Site I.D.: Omega Protein

Purchase Order

06-012

Sample I.D.: SC-OP-MWL5 Laboratory Sample I.D.: 10030124-005 Date/Time Sampled: 03/04/10 09:14 Analysis Sample Results Rep Limi Date/Time Analyst Parameter Method 03/04/10 15:10 WBP Colilert 18/QT < 1 mpn/100mL E. Coli 0.5000 03/11/10 14:50 MWL SW6010C 4.97 mg/L Aluminum MWL SW6010C 0.0100 03/11/10 14:50 Copper < 0.01 mg/L SW6010C < 0.01 mg/L 0.0100 03/11/10 14:50 MWL Silver EPA350.1/R2.0 0.60 mg/L 0.10 03/08/10 14:17 SLH Ammonia

EPA300.0/R2.1 14.8 ma/L 03/08/10 18:55 ÇL Chloride 1.0 LMT/JPV 0.3 mg/L 0.1 03/04/10 12:36 Calc. Nitrate 0.1 03/09/10 13:18 JPV SM18/4500-NO3 F 0.3 mg/L Nitrate+Nitrite LMT/JPV SM18/4500-NO2 B < 0.05 mg/L 0.05 03/04/10 12:36 Nitrite JPV SM18/4500-P E 0.12 mg/L 0.01 03/08/10 9:09 Phosphorus, Total 03/08/10 12:43 BHW Total Organic Carbon (TOC) SW9060 6.3 mg/L 1.0

Sample I.D.: SC-OP-MWL6

Laboratory Sample I.D.:

10030124-006

Date/Time Sampled: 03/04/10 08:49 Analysis Date/Time Analyst Parameter Method Sample Results Rep Limi Colilert 18/QT < 1 mpn/100mL 1 03/04/10 15:10 WBP E. Coli SW6010C 5.60 mg/L 0.5000 03/11/10.14:52 MWL Aluminum 0.0100 MWL SW6010C < 0.01 mg/L 03/11/10 14:52 Copper 0.0100 MWL SW6010C < 0.01 mg/L03/11/10 14:52 Silver 03/08/10 14:19 SLH EPA350.1/R2.0 < 0.1 mg/L 0.10 Ammonia EPA300.0/R2.1 6.8 mg/L 1.0 03/08/10 19:10 CL Chloride Calc. 0.7 mg/L 0.1 03/04/10 12:36 LMT/JPV Nitrate JPV Nitrate+Nitrite SM18/4500-NO3 F 0.7 mg/L 0.1 03/09/10 13:21 < 0.05 mg/L 0.05 03/04/10 12:36 **LMT/JPV** Nitrite SM18/4500-NO2 B JPV 0.01 03/08/10 9:09 SM18/4500-P E 0.13 mg/L Phosphorus, Total 03/08/10 12:43 SW9060 1.1 mg/L 1.0 **BHW** Total Organic Carbon (TOC)



Certificate of Analysis

Final Report

Laboratory Order ID 10030124

Client Name:

Swift Creek Environmental, Inc.

Date Received:

March 04, 2010

8201 County Drive

Disputanta, VA 23842

Date Issued:

March 11, 2010

Submitted To: Tom Houghton

Project Number:

06-012

Client Site I.D.: Omega Protein

Purchase Order

06-012

Ted Soyars

Laboratory Manager

The test results listed in this report relate only to the samples submitted to the laboratory and as received by the Laboratory.

Unless otherwise noted, the test results for solid materials are calculated on a dry weight basis. Analyses for pH, dissolved oxygen, temperature, residual chlorine and sulfite that are performed in the laboratory do not meet NELAC requirements due to extremely short holding times. These analyses should be

The signature on the final report certifies that these results conform to all applicable NELAC standards unless otherwise specified. For a complete list of the Luboratory's NELAC certified parameters please contact customer service.

This report shall not be suproduced except in full without the expressed and written approval of an authorized representative of Air Water & Soil Laboratories, Inc.





CHAIN OF CUSTODY

LABORAT	ORIES, INC	G.		- 4			CHA	AIN (OF C	us	TO	DY				į.			PAGE	OF
CLIENT NAME: "Swift	CES	PEN-	明之ては	عالم لي	STAN	_					PR	OJE	ECT NA	ME:	01	456	~~	Pes	Total	
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CLIENT ADDRESS:	201	-91	المروحا	Dr	VE.	Di	يحاد	-10-	ATE	A	PR	OJE	ECT NU	MBEF	l;	6	<u></u>	ے اح	-	
CLIENT PHONE NUMBER:	80			32	3						P.C). N	UMBER	₹:				012		
CLIENT FAX NUMBER:			EMAIL:	Swi	Flo	2E 6	KU	re	200	ع.را	RE	GU	LATOR	Y AUT	HORIT	Ý: '	V174	EQ		
Is sample for compliance repo	orting?	ES NO			Is sam									NO		PWS I	.D.#:			
SAMPLER NAME (PRINT):	75 A	لمسد	الحليا	¥	SAMP	LER	SIGN	NATU	RE:	7	5-	1		_	e Rd	Turn /	Arouni	d Time:	5	Day(s)
Have ammonia and TKN samples been ver	rified to be de	chlorinated :	at the time of	sampling?:	YES	N)	T	MA	TRI	X			ANA	LYSIS	(PRE	SERVA	ATIVE)		·COMMENTS
1) SC - SP - MWL1 2) SC - SP - MWL2 3) SC - SP - MWL2 4) SC - SP - MWL4 5) SC - SP - MWL4 5) SC - SP - MWL4 7) 8) 9) 10) RELINQUISHED: RELINQUISHED:	Composite Start Date	1320		10 12 a 12	Number of Containers	XXXXX Grab	3/4	XXXXXX	20	QC	Dat	ta P	A STANCE OF THE	X X X		X X X	X - X - X - X	COOLE X		
P		5								1	Level				CE mega Pr	oteln		100 DUE:	3012	aya r
RELINQUISHED:	DATE /	TIME	RECEIVED:	•			DA	ATE / 1	IME	1.	Level I			1 1	Malling .		MILI	Reod:	•	



		SCE	1003	0124
8	Sample Conditions Checklist	Omega Protein	DUE: Recd;	5 Days 03/04/10
-	d by: (print) Lab ID No.:	3/4/10	T()	a v
(sign)	Date Cooler Opened:	11/1/2		
1980	·	YES NO	N/A	
1.	How were samples received? Fed Ex UPS Courier Walk In			ONE.
2.	Were custody seals used?		<u>U</u>	
3.	If yes, are custody seals unbroken and intact at the date and time of arrival?			
⁶ 4.	Are the custody papers filled out completely and correctly?		\Box	
5.	Do all bottle labels agree with custody papers?			
6.	Are the samples received on ice?			
7.	Is the temperature blank or representative sample within acceptable limits? (4 degrees Celsius +/-2)			
8.	Are all samples within holding time for requested tests?		in the	
9	Is a sufficient amount of sample provided to perform the tests indicated?	<u> </u>		
10	Are all samples in proper containers for the analyses requested?	₽ 0		
11	Are all samples appropriately preserved for the analyses requested?			
12	Are all volatile organic containers free of headspace?	. 0.0	CH	/
	COMMENTS .		-	
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Order ID

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-	10030124	•

pH Preservation Log

	1	Meta		Cyan	de	Sulfie			nonia		TKN		Př	108,	Tot	N	03+N	102		DRC			= -0.0				
	Container ID	PH #8 Received	at pH adjust,)	pH as Received > 12 Other	al pH solust,)	pH as Received > 9 Other	Final pH (If adjust.)	pH as Receive	- n =	pi Rec	H as bovie	Finat pH (If adjust.)	_	as i bovie	Final pH (If adjust.)	Rec	Has œived	Final pH (if adjust.)	Re	H as icelysd	Final pH (Hadjust.)	Pi Red	elved	Final pH (If adjust.)	PH Rece	lved	Final pH (if adjust.)
: Sample ID		<2 Other	EE	> 12 Other	£	> 9 Other	ΕĒ	<2 Other	r EE	<2	Other	E E	<2	Other	25	<2	Other	ĒE	< 2	Other	品书		Other	ÊE		Other	EE
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Order ID

pH Preservation Log

Date Performed:

3/4/10

	\$		Meta		C	yani	de		Sulfic	le	A	mmo	nla		TKN		P	nos,	Tot	N	03+N	102	:	DRC							
	Container ID	P Re-	H as celved	naf pH adjust.)	pi Rec	das solved Other	nel pH adjust.)	pi Rec	l as elved Other	nel pH adjust.)	P Res	H aa celved	Final pH (If adjust.)	P Re	H as celved	nal pH adjust.)	Red	Has colved Other	nal ptf adjust.)	Pi Rec	Has celved Other	Final pH (if adjust.)	Re	H BB celved	Final pH (if adjust.)	pi- Rec	RE elved	Final pH (If adjust.)	Rece	as	Final pH
Sample ID			Other	i t	> 12	Other	世色	>9	Other	EE	<2	Other	£ E	<:2	Other	E.E.	<2	Other	ĒE	<2	Other	EE	<2	Other	25		Other	EE		Other	W. 6
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Certificate of Analysis

Final Report

Laboratory Order ID 10030507

Client Name: Omega Protein

P.O. Box 175

610 Menhaden Road

Reedville, Virginia 22539

Submitted To: Ted Schultz

Project Number

Purchase Order

Date Received: Date Issued:

NA

3371

March 23, 2010

April 22, 2010

Client Site I.D. Omega Protein

Sample Summary List

Laboratory Sample ID	Sample ID	Sample Date	Receive Date
10030507-001	20Mar10-VM-A1	03/20/2010	03/23/2010
10030507-002	20Mar10-VM-A2	03/20/2010	03/23/2010
10030507-003	20Mar10-VM-B	03/20/2010	03/23/2010
10030507-004	20Mar10-VM-C	03/20/2010	03/23/2010

Laboratory Manager

End Notes:

The test results listed in this report relate only to the samples submitted to the laboratory and as received by the Laboratory.

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The signature on the final report certifies that these results conform to all applicable NELAC standards unless otherwise specified. For a complete list of the Laboratory's NELAC certified parameters please contact customer service.

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Certificate of Analysis

Final Report

Laboratory Order ID 10030507

Client Name: Omega Protein

P.O. Box 175

610 Menhaden Road

Reedville, Virginia 22539

Submitted To: Ted Schultz

Client Site I.D. Omega Protein

Project Number

Date Received:

Date Issued:

Purchase Order

NA 3371

March 23, 2010

April 22, 2010

"Analytical Results "

Sample I.D.: 20Mar10-VM-A1

Date/Time Sampled: 03/20/10 17:45

Parameter TPH-Volatiles (GRO)

Method SW8015C

Sample Results < 0.5 mg/L

Qual Rep Limit 0.5

Analysis Date/Time

03/26/10 13:26

Laboratory Sample I.D.: 10030507-001

Analyst AJR

= Analytical Results

Sample I.D.: 20Mar10-VM-A2

Date/Time Sampled: 03/20/10 17:45

TPH-Semi-Volatiles (DRO)

Method SW8015C

Method

EPA200.7/R4.4

EPA200.7/R4.4

EPA200.7/R4.4

Sample Results $< 0.5 \, \text{mg/L}$

Sample Results

Sample Results

See Attached

< 0.01 mg/L

< 0.01 mg/L

< 10 ug/L

Qual Rep Limit 0.5

Analysis Date/Time

03/29/10 14:13

Laboratory Sample I.D.: 10030507-002

Analyst JHV

Analytical Results

Parameter

Copper, Dissolved

Lead, Dissolved

Zinc, Dissolved

Tributyltin

Sample I.D.: 20Mar10-VM-B

Date/Time Sampled: 03/20/10 17:45

Laboratory Sample I.D.: 10030507-003

Analysis

Qual Rep Limit Date/Time Analyst 03/29/10 16:51 MWL 0.01 0.01 03/29/10 16:51 MWL MWL 10 03/29/10 16:51

Analytical Results

Sample I.D.: 20Mar10-VM-C

Date/Time Sampled: 03/20/10 17:45

Parameter

Method 85-3295

Laboratory Sample I.D.: 10030507-004

Qual Rep Limit

Analysis

Date/Time

Analyst

042220101426



Certificate of Analysis

Final Report

Laboratory Order ID 10030507

Client Name:

Omega Protein

P.O. Box 175

610 Menhaden Road

Reedville, Virginia 22539

Submitted To: Ted Schultz

Client Site I.D. Omega Protein

Date Received:

Date Issued:

March 23, 2010 April 22, 2010

NA

Project Number Purchase Order

3371

Summary of Analytical QC Batches

QC Batch ID QC100329015 Method

SW8015C

SW8015C

10030507-001

10030507-002

Sample List

QC100329024 QC100330008

EPA200.7/R4.4

10030507-003

CHAIN OF CUSTODY RECORD

Client:	Omega Protein, Inc.	Lab: F&R
Contact:	Ted Schultz	AWS
Address:	P.O. Box 175	Other
3	Reedville VA 22539	

Phone:

(804) 453-4211

Fax: eMail: (804) 453-4123

tschultz@omegaproteininc.com

Project Name: Omega Protein

Sampled By: Ted Schultz

							Requested Test Parameters										
							TDZ	TRS	TRC	Salinity	NH3	TPH	Dis Cu		Dis Pb	TBT	TPH
Lab ID	Date Sampled	Time Sampled	Grab	Comp	Sample Identification	# of Containers											
	3/20/10	17:45	X		20Mar10-VM-A1	2						GRO					
	3/20/10	17:45	Х		20Mar10-VM-A2	1											DRO
	3/20/10	17:45	Х	1	20Mar10-VM-B	1					1		х	х	х		
3/20	3/20/10	17:45	Х		20Mar10-VM-C	1										Х	
				9													

							OP Omega Protein	10030507
Relinquished By	Date	Time	Received By	Date	Time	VI BEO Gampios		3 001 1
						VPDES Samples	P(O 3371
// Rélinquished By	Date	Time	Received By	Date	Time	Other samples collected in provided cor	itainers 4 deg C	conice
Oxton W	32%	12:35	Jewi 2 brobe	HZAIO	1235	Dissolved metals samples held intered,		6.000
Relinquished By	Date	Time	Received By	Date	Time		Comments:	1 000

Omega Protein

DUE: 5 Days Recd: 03/23/10



	Sample Conditions Checkli	OP Omega Protein	10030507 DUE: 5 Days Recd: 03/23/10
Opened	Lab ID No.: Date Cooler Opened:	3-23-10	
1.	How were samples received? Fed Ex UPS Courier Walk In	<u>YES N</u>	<u>O N/A</u>
2.	Were custody seals used?] [
3.	If yes, are custody seals unbroken and intact at the date and time of arrival?		1 12
4.	Are the custody papers filled out completely and correctly?		3 []
5.	Do all bottle labels agree with custody papers?		
6.	Are the samples received on ice?		
7.	ls the temperature blank or representative sample within acceptable limits? (4 degrees Celsius +/-2)		
8.	Are all samples within holding time for requested tests?		
9	Is a sufficient amount of sample provided to perform the tests indicated?		
10	Are all samples in proper containers for the analyses requested?		
11	Are all samples appropriately preserved for the analyses requested?	<u> </u>	
12	Are all volatile organic containers free of headspace?		3 O
	COMMENTS		
(- *

UNIVERSAL LABORATORIES

20 Research Drive Hampton, Va 23666

1-800-695-2162

(757) 865-0880 Fax: (757) 865-6014

E-mail: Info@universallaboratories.net

Date:

Wednesday, April 21, 2010

Pages:

Page 1 of 2

To:

Jessica Comstock

Air Water & Soil Laboratories

Fax#:

(804) 358-8297

From:

Mike Jennings

Subject:

Results for Project N/A

designated as UL Order Id 1003545 and received on

Wednesday, March 24, 2010



UNIVERSAL LABORATORIES

20 Research Drive Hampton, Va 23666

REPORT OF ANALYSIS

Order ID:

1003545

(REPORT DATE) 21-Apr-10

TO: Air Water & Soil Laboratories

2109 A North Hamilton Street Richmond VA

7578658014

ATTN: Jessica Comstock

Project ID: N/A

Project # N/A

Site:

Client Log #100830507-004

Matrix: Wastewater Comments for Order:

Sample ID: Grab Date/Time:

Client Log #100830507-004 3/20/2010 17:45

Composite Start:

UL Sample Number: 1003545-001

N/A N/A

Composite Stop: Collected By:

CLIENT

UL Report Analysis Test Analyst Parameter Method Limit Date/Time Result Units TBT Tributyltin GC/FPD <L ng/l 4/14/2010 30 BD 4:48:00 PM LCS/Dup outside acceptable limits.

Comments for Sample ID 1003645-001

No comments

Respectfully Submitted,

UNIVERSAL



1003454 Universal

2109A NORTH HAMILTON STREET RICHMOND, VIRGINIA 23230 (804) 358-8295 PHONE (804)358-8297 FAX

LABORAY	NORES, IN	IC.					CH	All	N O	FC	US	TO	DY	,							PAG	E	I OF I
CLIENT NAME: ALDS							PROJECT NAME:																
CLIENT CONTACT: Jessica Comptet								SITE NAME:															
CLIENT AODRESS:								PROJECT NUMBER: 10030507															
CLIENT PHONE NUMBER:										P.O. NUMBER:						-							
CLIENT FAX NUMBER:			EMAIL:									REGULATORY AUTHORITY:											
ts sample for compliance repo	orting?	YES NO)		ls sam	ple t	mon	ас	hlori	nale	d sı	_											
SAMPLER NAME (PRINT):					SAMP	LER	SIG	NA	TUR	Œ:			-								Due 3-30		Day(s)
Have ammonia and TKN samples been ve	rified to be d	echlorinated	at the time of	sampling?:	YES	٨	10			MA	TRI	X			A٨	IALYSIS		_				7	MMENTS
CLIENT SAMPLE I.D.	Composite Start Date	Composite Start Time	Grab Date or Composite Stop Date	Grab Time or Composite Stop Time	Number of Containers	Grab	Composite	Field Filtered (Dissolved Metals)	Ground Water / Surface Water Waste Water / Storm Water	Waste Water Committee	Soil	Solids	Other	一下のちょうかり								PRES	ELEASE NOTE SERVATIVE(S) or IP RATE (Umin)
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Facility Name: Omega Protein Address: Reedville, VA.	
VPDES Permit No.: VA0003867	
Report Period: From 4/1/10 To	4/4/10
Paint Area	COMPLIANCE / NONCOMPLIANCE * (check as appropriate)
8 -24	
A TOTAL TOTA	· · · · · · · · · · · · · · · · · · ·
*Comments on Noncompliance	
Theodore Schultz / Tea	thorized Agent / Title
I certify under penalty of law that this supervision in accordance with a systematic evaluate the information submitted. Expension or those persons directly responsible my knowledge and belief true, accurately submitting false information, including	document and all attachments were prepared under my direction or tem designed to assure that qualified personnel properly gather and based on my inquiry of the person or persons who manage the system for gathering the information, the information submitted is to the best of ate and complete. I am aware that there are significant penalties for the possibility of fine and imprisonment for knowing violations. See 18 paragraph 1319. (Penalties under these statutes may include fines uponment of between 6 months and 5 years).

Facility Name: Omega Protein Address: Reedville, VA.
VPDES Permit No.: VA0003867
Report Period: From 4,5,10 To 4,11,10
Paint Area COMPLIANCE / NONCOMPLIANCE * (check as appropriate)
*Comments on Noncompliance
Theodore Schuttz /Technical Supervisor Name of Principal Exec. Officer or Authorized Agent / Title
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See 18 U.S.C. paragraph 1001 and 33 U.S.C. paragraph 1319. (Penalties under these statutes may include fines up to \$10,000 and or maximum imprisonment of between 6 months and 5 years). Signature of Principal Officer or Authorized Agent / Date

Facility Name: Omega Protein Address: Reedville, VA.
VPDES Permit No.: VA0003867 Report Period: From 4/12/10 To 4/18/10
Paint Area COMPLIANCE / NONCOMPLIANCE * (check as appropriate)
*Comments on Noncompliance
Theodore Schultz / TECHNICAL Supervisor Name of Principal Exec. Officer or Authorized Agent / Title
I certify under penalty of law that this document and all attachments were prepared under my direction of supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See 18 U.S.C. paragraph 1001 and 33 U.S.C. paragraph 1319. (Penalties under these statutes may include fines up to \$10,000 and or maximum imprisonment of between 6 months and 5 years). Signature of Principal Officer or Authorized Agent / Date

Facility Name: Omega Protein Address: Reedville, VA.	
VPDES Permit No.: VA0003867	
Report Period: From 4/19/10 To 4/25/10	8
Paint Area COMPLIANCE / NONCOMPLIANCE * (check as appropriate)	
*Comments on Noncompliance	
Theodore Schultz / Technical Supervisor	
Name of Principal Exec. Officer or Authorized Agent / Title	
I certify under penalty of law that this document and all attachments were prepared under my direction supervision in accordance with a system designed to assure that qualified personnel properly gather at evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is to the best my knowledge and belief true, accurate and complete. I am aware that there are significant penalties to submitting false information, including the possibility of fine and imprisonment for knowing violations. See U.S.C. paragraph 1001 and 33 U.S.C. paragraph 1319. (Penalties under these statutes may include fines to \$10,000 and or maximum imprisonment of between 6 months and 5 years).	m of or

Signature of Principal Officer or Authorized Agent / Date

Facility Name: Omega Protein Address: Reedville, VA.	3 · · · · · · · · · · · · · · · · · · ·
VPDES Permit No.: VA0003867	
Report Period: From 4/26/10 To 4/	<u>30,</u> 10
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The second of th	
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*	
*Comments on Noncompliance	8
Theodore A Schultz Name of Principal Exec. Officer or Author	Technical Supervisor ized Agent / Title
supervision in accordance with a system of evaluate the information submitted. Based or those persons directly responsible for gamy knowledge and belief true, accurate a	W1 5/4/2010

Facility Name: Omega Protein Address: Reedville, VA.	
VPDES Permit No.: VA0003867 Report Period: From 4/1/10 To 4/	4/10
Paint Area COM	MPLIANCE / NONCOMPLIANCE * (check as appropriate)
()	
*Comments on Noncompliance	*
Theodore Schultz / Techno Name of Principal Exec. Officer or Authoriz	red Agent / Title
I certify under penalty of law that this docur supervision in accordance with a system de evaluate the information submitted. Based or those persons directly responsible for gat my knowledge and belief true, accurate an	ment and all attachments were prepared under my direction of esigned to assure that qualified personnel properly gather and on my inquiry of the person or persons who manage the system thering the information, the information submitted is to the best of discomplete. I am aware that there are significant penalties for ossibility of fine and imprisonment for knowing violations. See 18 graph 1319. (Penalties under these statutes may include fines up of between 6 months and 5 years).

Facility Name: Omega Protein Address: Reedville, VA.	a a	
VPDES Permit No.: VA0003867		
Report Period: From 4,5,10 To 4	4,11,10	
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*Comments on Noncompliance	s.	
Theodore Schutz, Name of Principal Exec. Officer or Autr	/Technical Supervisor horized Agent / Title	
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Facility Name: Omega Protein Address: Reedville, VA.
VPDES Permit No.: VA0003867
Report Period: From 4/12/10 To 4/18/10
Paint Area COMPLIANCE / NONCOMPLIANCE * (check as appropriate)
*Comments on Noncompliance
Theodore Schultz / TECHNICAL Supervisor Name of Principal Exec. Officer or Authorized Agent / Title
I certify under penalty of law that this document and all attachments were prepared under my direction of supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See 18 U.S.C. paragraph 1001 and 33 U.S.C. paragraph 1319. (Penalties under these statutes may include fines up to \$10,000 and or maximum imprisonment of between 6 months and 5 years).

Facility Name: Omega Protein Address: Reedville, VA.	e ×
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Report Period: From 4/19/10 To	4,26,10
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Theodore Schultz Name of Principal Exec. Officer or Ar	uthorized Agent / Title
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Facility Name: Omega Protein Address: Reedville, VA.		
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Signature of Principal Officer or Authorized Agent / Date

Facility Name: Omega Protein Address: Reedville, VA.
VPDES Permit No.: VA0003867
Report Period: From 3/1/10 To 3/7/10
Paint Area COMPLIANCE / NONCOMPLIANCE * (check as appropriate)
*Comments on Noncompliance
Theodore Schultz / Technical Supervisor Name of Principal Exec. Officer or Authorized Agent / Title
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See 18 U.S.C. paragraph 1001 and 33 U.S.C. paragraph 1319. (Penalties under these statutes may include fines up to \$10,000 and or maximum imprisonment of between 6 months and 5 years). Signature of Principal Officer or Authorized Agent / Date

Facility Name: Omega Protein Address: Reedville, VA.	
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Report Period: From 3/8/10 To 3/19	<u>4</u> 10
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Theodore Schultz / Te	ed Agent / Title
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to \$10,000 and or maximum imprisonment o	f between 6 months and 5 years). \[\(\lambda \rightarrow \frac{7}{2010} \)
Signature of Principal Officer or Authorized A	Agent / Date

Facility Name: Omega R Address: Reedville, VA	Protein	
	VA0003867 3/15/10 το 3/21/10	
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I certify under penalty supervision in accordevaluate the information those persons directly who wiedge and be submitting false inform U.S.C. paragraph 100 to \$10,000 and or magnitude.	of law that this document and all attachment ance with a system designed to assure that of on submitted. Based on my inquiry of the person of	Its were prepared under my direction of qualified personnel properly gather and son or persons who manage the system the information submitted is to the best or the that there are significant penalties for irisonment for knowing violations. See 18 under these statutes may include fines up

Facility Name: Omega Protein Address: Reedville, VA.
VPDES Permit No.: VA0003867 Report Period: From 3/23/10 To 3/28/10
Paint Area COMPLIANCE / NONCOMPLIANCE * (check as appropriate)
*Comments on Noncompliance Theodore Schultz / Technical Supervisor Name of Principal Exec. Officer or Authorized Agent / Title
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See 18 U.S.C. paragraph 1001 and 33 U.S.C. paragraph 1319. (Penalties under these statutes may include fines up to \$10,000 and or maximum imprisonment of between 6 months and 5 years). Signature of Principal Officer or Authorized Agent / Date

Facility Name: Omega Protein Address: Reedville, VA.
VPDES Permit No.: VA0003867 Report Period: From 3/29/0 To 3/31/10
Paint Area COMPLIANCE / NONCOMPLIANCE * (check as appropriate)
*Comments on Noncompliance Theodore Schultz / Technical Supervision Name of Principal Exec. Officer or Authorized Agent / Title
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See 18 U.S.C. paragraph 1001 and 33 U.S.C. paragraph 1319. (Penalties under these statutes may include fines up to \$10,000 and/or maximum imprisonment of between 6 months and 5 years). Signature of Principal Officer or Authorized Agent / Date

VPDES Permit No.: VA0003867 Report Period: From 2/1/10 To 2/7/10 Paint Area COMPLIANCE / NONCOMPLIANCE * (check as appropriate)	
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Theodore Schultz / Technical Supervisor Name of Principal Exec. Officer or Authorized Agent / Title	
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Facility Name: Omega Protein

Address: Reedville, VA.	
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Theodore Schultz /Tech. Name of Principal Exec. Officer or Authorized A	gent/ Title
supervision in accordance with a system design evaluate the information submitted. Based on mor those persons directly responsible for gathering knowledge and belief true, accurate and consultating false information, including the possible submitting false information, including the possible statement.	and all attachments were prepared under my direction or ned to assure that qualified personnel properly gather and y inquiry of the person or persons who manage the system ing the information, the information submitted is to the best of implete. I am aware that there are significant penalties for fility of fine and imprisonment for knowing violations. See 18 in 1319. (Penalties under these statutes may include fines up

Signature of Principal Officer or Authorized Agent / Date

Facility Name: Omega Protein Address: Reedville, VA.
VPDES Permit No.: VA0003867
Report Period: From 3/19/0 To 2/21/10
Paint Area COMPLIANCE / NONCOMPLIANCE * (check as appropriate)
*Comments on Noncompliance
Theodore Schultz / Technica / Signervisor Name of Principal Exec. Officer or Authorized Agent / Title
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See 18 U.S.C. paragraph 1001 and 33 U.S.C. paragraph 1319. (Penalties under these statutes may include fines up to \$10,000 and or maximum imprisonment of between 6 months and 5 years). Signature of Principal Officer or Authorized Agent / Date

Facility Name: Omega Protein Address: Reedville, VA.
VPDES Permit No.: VA0003867 Report Period: From 2/22/10 To 2/23/10
Paint Area COMPLIANCE / NONCOMPLIANCE * (check as appropriate)
*Comments on Noncompliance
Theodore Schultz / Technical Supervisor Name of Principal Exec. Officer or Authorized Agent / Title
I certify under penalty of law that this document and all attachments were prepared under my direction of supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See 18 U.S.C. paragraph 1001 and 33 U.S.C. paragraph 1319. (Penalties under these statutes may include fines up to \$10,000 and or maximum imprisonment of between 6 months and 5 years). Signature of Principal Officer or Authorized Agent / Date

Facility Name: Omega Protein Address: Reedville, VA.
VPDES Permit No.: VA0003867
Report Period: From 1 11 1/6 To 11/6/10
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*Comments on Noncompliance
Theodore Schutte Technical Supervisor Name of Principal Exec. Officer or Authorized Agent / Title
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Signature of Principal Officer or Authorized Agent / Date

to \$10,000 and or maximum imprisonment of between 6 months and 5 years).

Facility Name: Omega Protein Address: Reedville, VA.	
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Theodore Schu Name of Principal Exec. Office	or Authorized Agent / Title
supervision in accordance with evaluate the information submit or those persons directly respor my knowledge and belief true, submitting false information, inc	at this document and all attachments were prepared under my direction or a system designed to assure that qualified personnel properly gather and ted. Based on my inquiry of the person or persons who manage the system sible for gathering the information, the information submitted is to the best of accurate and complete. I am aware that there are significant penalties for luding the possibility of fine and imprisonment for knowing violations. See 18 J.S.C. paragraph 1319. (Penalties under these statutes may include fines up prisonment of between 6 months and 5 years). **Description** **Calor: Calor: Cal

Facility Name: Omega Protein Address: Reedville, VA.
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Report Period: From 112510 To 113110
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Threedore Schultz / Technical Supervisor Name of Principal Exec. Officer or Authorized Agent / Title
I certify under penalty of law that this document and all attachments were prepared under my direction of supervision in accordance with a system designed to assure that qualified personnel properly gather an evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See 1 U.S.C. paragraph 1001 and 33 U.S.C. paragraph 1319. (Penalties under these statutes may include fines u to \$10,000 and or maximum imprisonment of between 6 months and 5 years).
Signature of Principal Officer or Authorized Agent / Date

OMEGA PROTEIN INC.

Inter-Office Correspondence

TO: CAPTAINS

FROM: TOM BLENCOWE

CC:

DATE: 10 11 01

SUBJECT:

REFRIGERATION WATER

STARTING MONDAY 10 | 15 | 01 EACH TIME

YOU PUMP-OFF REFRIGERATION WATER

FOR UN LOADING YOU MUST LOG IT IN ON

THE ATTACHED LOG AND TURN IN YOUR

WEEKS LOG WITH YOUR PAPERS ON

FRIDAY. USE THE COLUMNS STARTING WITH

"DISCHARGE LOCATION" AND ENDING WITH "HEADING."

THE OTHER COLUMNS ARE FOR BAILING WATER ONLY.

PLEASE PUT THE VESSEL NAME ON THE TOP OF

THE LOG.

WE JUST HAD A REVIEW OF OUR PERMIT AND THIS IS A REQUIREMENT. THE ITEMS THAT APPLY TO US ARE MARKED IN YOUR INFORMATION,

THERE ARE ENOUGH PAGES FOR THE REST OF THIS YEAR AND NEXT YEAR, PLEASE PUT THE LOG BACK IN YOUR BOX AT THE END OF THE SEASON SO THAT I WILL KNOW YOU HAVE IT FOR ZOOZ.

THE BOTTOM. ANY QUESTIONS PLEASE SEE ME OR LYELL JETT.